ABSTRACT OF THE

Croonian Lectures

ON THE

CLIMATE AND FEVERS OF INDIA.

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LECTURE I.

THE plan proposed by the lecturer was to give a brief outline of the physical characters of the country, climate, and people, and of the prevalence of fever in India, and then, under the head of Malaria and Malarial Fevers, to describe the various remittent and intermittent fevers it assumes, as well as some of the morbid conditions closely related to malarial fevers. Under continued fevers he would include enteric, ardent, and other fevers, comparing them with continued fever in temperate climates, and noting their relations to climatic influences.

Climate.—As regards climate, India may be divided into three regions:—1. Himalayan, which includes Bhotan, Nepal, Gurhwal, Cashmere, and Cabul. 2. Hindostan, which extends along the foot of the Himalayan range, and includes the alluvial plains of the great rivers Ganges and Indus, with their numerous tributaries, as far south as the Vindyah and Satpoora mountains. 3. Tropical India, or the Deccan, which consists of elevated table-lands, littoral plains intersected by numerous rivers, mountain ranges, and isolated hills. There are three distinct seasons in India—the hot, the rainy, and the cold—which vary in duration, and times of setting in; the cold season extends from November to March, the hot from March to June or July, and the rainy season from that to October or November, these seasons being greatly influenced by the monsoons, or periodic seasonal winds. The south-west monsoon commences in May with storms, soon followed by the bursting of the rain on the Malabar coast, but does not reach regions further north till later in the year. Its force and influence are well-nigh spent ere it passes the twenty-fifth parallel of north latitude. The Carnatic and Coromandel coasts, being sheltered by the Western Ghâts, are dry when the west coast is deluged with rain. In the north-west the rains begin towards the end of June, and fall in diminished quantity. Near the hills the rainfall increases; but in the Southern Punjab and Desert there is very little rain. There are tracts of country commencing in Sind which are almost rainless, or with a fall as low as 2 in.; whilst in the Khasia hills, on the north-east frontier, 600 in. fall in the year. Next to this, the Western Ghâts and coast of Tenasserim have the greatest fall; at Mahableshwar 250 in. to 300 in., and on the Tenasserim coast 180 in. fall yearly. The amount of atmospheric humidity also varies greatly: hot plains, like Sind, where there is little or no rain, have an atmosphere almost saturated with moisture, and on some of the lower mountain ranges, in Bengal, and in many districts near the coast in Southern India, the air is very damp. But on the elevated table-lands of the Deccan and Central India, and on the hot sandy plains of North-West India, a dry air blows like a furnace-blast during the months of May and June. The north-west monsoon commences in October, and is dry, except on the Coromandel coast, where it brings rain between October and December. Variable winds last till about June. About the end of May the south-west monsoon again sets in, bringing a few showers, known as the lesser rains, which precede the greater rains. In the hill stations, and generally in the elevated provinces of the lower ranges of the Himalayas, also the Nilgherries and Ghâts—stations at elevations of 5000 to 7000 feet—the climate is genial, the rainfall in most is moderate, it is cool and healthy in summer, and almost as bracing in winter as Europe. These may perhaps become the sites of future colonisation, for it seems probable that there the European may thrive and continue to reproduce his race, which, it is said, would cease to exist in the plains after the third generation.

Rainfall.—The rain map of India shows areas of rainfall of various degrees of irregular form and extent. In the north-west corner of India there are arid regions which have a fall of less than 15 in., in many parts much less, whilst the desert is to some extent rainless. This area includes Sind, part of the Punjab, and of Rajputana. There is a northern dry zone, with an annual fall of between 15 in. and 30 in., surrounding the arid region on the north and east in a belt of 100 to 200 miles wide. The upper parts of the valley of the Ganges, Central India, and the coast of the Madras Presidency have a fall of between 30 in. and 60 in. There is also a southern dry region, which extends from Nassick to Cape Comorin, whilst the deltas of the Mahanuddi and Ganges, and the lower part of the Gangetic Valley, have a fall of between 60 in. and 75 in. There are two belts of excessive rainfall, one extending along the Aracan coast from the mouth of the Irawaddy up the valley of the Burhampootra. The other, on the west coast of India, from Cape Comorin to the Tapti—from the seashore to the summit of the Ghâts. In these regions the most remarkable falls occur, as they are placed in the direct course of the south-west monsoon, and catch its first impact at heights where vapour is most readily condensed. Cherra Poonjee, in the Khasia hills, at 4500 ft. above the sea has 600 in. of rain in six months on the edge of an abrupt mountain plateau, situated about 200 miles from the Bay of Bengal; the intervening country is alluvium, covered with rivers and swamps. Over this the south-west monsoon blows, laden with moisture, which is increased by the wet country over which it passes. At Mahableshwar, in the Western Ghâts, the conditions are somewhat similar, the fall amounting to about 300 inches; but these excessive rainfalls in certain elevated regions are quite local, no more representing the average rainfall of all India than does the heavy fall on the hills on the west coast represent the average rainfall of Great Britain.

Irrigation.—Though great part of India is amply supplied with rain there are regions where the normal quantity is so small that it is insufficient to produce the crops necessary for the support of the population, and where, without the aid of artificial irrigation, the land would be sterile. The Government of India has given much attention to artificial irrigation, and many gigantic works have been completed for this purpose; some are new, others are reconstructions of works of the Hindoo and Mahomedan periods; and the importance they attached to irrigation is manifested in the canals, anicuts or dams of rivers, and reservoirs, many in ruins, left by those people. The area now irrigated is nearly six and a half millions of acres, and the area irrigable by canals is capable of extension. The agricultural benefit derived from this system of irrigation is no doubt great, but with the water there is generation of malaria and fever, to what extent is presently shown. Another point is the influence of the rainfall on the growth of forests, and their effects on climate. There is reason to believe that some of the desert plains of India were at one time covered with trees; when they were so the climate was cooler than it is now. The desert regions in the north-west having once been the seat of early Hindoo civilisation and population, it is obvious that the physical conditions of the country must have been very different from what they are now, and it seems probable that the change is due to destruction of trees. The cultivation and protection of forests, therefore, are matters of the greatest importance, for they temper the climate by the moisture they exhale, and tend to cause rain where there would be none.

Population.—The population of India, according to the last census (Feb. 1881), is 252,541,210; the males exceeding the females by about 1·50th. It has increased about twelve millions and a quarter since 1872, at the rate of 6½ per cent., except in Bombay, Mysore, and Madras, where there is a decrease owing to famine and its consequences. The census of 1872 was, roughly, about 239,750,000. The average of the whole population gives 162 persons per square mile, but the number varies considerably in different provinces.[1] This vast mass of human beings, double the number of the population of the Roman Empire in the zenith of its power, and larger than the population of all Europe (excluding that of Russia), is composed of many races, and represents four elements: 1. The non-Aryan, composed of Turanian and Dravidian or Scythic stock, the aborigines so-called, and

[1] In Bengal it was 387, in Bombay 131, and in Baroda 454 per square mile; whereas native States in the Central Provinces had only 36 to the same area. Many causes, no doubt, combine to explain these differences

their descendants. 2. The Aryan, represented by the high-caste Hindoos, Bramins, and Rajpoots. 3. The great mixed population, commonly known as Hindoos, grown out of admixture of Aryan and non-Aryan elements. 4. The Mahomedans, who invaded India from the north and north-west; and to these must be added the Eurasians (108,402), and the European races who now rule India (121,148). As regards their distribution, the Himalayas are occupied chiefly by the Turanian stock, the plains of Hindustan by the Aryan race, and the table-land of the Deccan by a mixture of Aryan and Scythic or Dravidian races. The European and Eurasians are distributed over the whole continent.

Habits and Food.—Among this diversity of races there is equal divesity in physical characters. A Norwegian does not differ more widely from a Neapolitan than a Sikh or Patan from a Bengali; or the Rajpoot of the North from the peasant of Southern India. In mental and physical attributes there is close analogy; and, corresponding with the difference of climate, locality, and habits, they evince different capacities for enduring or resisting disease. The Mahomedans, Sikhs, some of the lower castes of Hindoos, and the aboriginal races, eat a mixed diet, including animal food, and are often robust, powerful people; many are in military service. The higher caste Hindoos subsist mainly on wheat, rice, millet, and other grains, supplemented by pulse, with milk, ghee, vegetables and fish—occasionally the flesh of the goat or pigeon. Those who inhabit northern India are powerful men, and from them the army is largely recruited. Among European and Eurasian there is a tendency to eat more animal food and to drink more alcohol than are required, though in both respects they are more judicious than in past years. The natives of all classes are, as a general rule, temperate as regards stimulants; though some races, such as the Sikhs, the low-caste Hindoos and the aboriginal races, drink freely. The use of tobacco, hemp, betel, and even opium—the latter especially in malarious districts—is prevalent; opium, however, is less used than by the Chinese. On the whole the natives of India are moderate and abstemious, rather under- than over-fed among the lower classes, and therefore more prone than the European to the asthenic condition in disease. The dress for the most part is of cotton, which in northern regions is supplemented by warmer materials. The dwelling is generally a hut, built so near the ground, and so ill-ventilated, that miasmata play a great part as a death cause. The lodging of the European is, as a general rule, good; sanitary precautions are duly observed, and the houses, barracks, clothing, food, and occupations of the British resident and the soldier are so well ordered and carefully supervised as to leave little to desire. The habits and social conditions of a large proportion of the native people are prejudicial; early marriages and sexual excess sap the vital force, whilst the effects of impoverished health and vitality, and of the diseases that result from imperfect nutrition, have been painfully manifested in the results of the famines that of late years have ravaged large districts and checked population, and the prevalence of malaria is shown in the character of the fevers and bowel complaints which destroy or deteriorate millions. It is satisfactory to know that under the fostering care of the British Government the intensity and mortality of disease are diminishing, and the mode of living is being improved.

Prevalence of Fever and its Causes.—Under this head it was pointed out that the mortality from fevers in the year 1879 out of a total number of registered deaths of 4,975,042 was 3,564,035, or thirteen times as much as cholera. In Calcutta in 1880, 3797 deaths are assigned to "fevers," and Clarke says that in 1770, 80,000 natives and 1500 Europeans died from fever in that city. In 1879 the British army in India numbered 57,810 men; of these 51,959 suffered from fever, with a mortality of 387. The native army, of 130,011 men, had 122,375 cases of fever with 756 deaths. The gaol population, of 117,680, had 73,484 cases of fever with 1306 deaths. 1879 was an unusually unhealthy year. In some districts the deaths rose to about 113 per 1000 of the population. In the Bombay Presidency the annual mortality from fevers averaged 193,508 during a period of fourteen years; but in 1880 the deaths were 246,779, or 15·21 per 1000 of the population; for every fatal case of cholera there were 360 deaths from fever. Statistics show that there is a far greater mortality in the rainy and dampand cold seasons than in the hot and dry,—not only in continued and malarial fevers, but also in inflammatory disorders, as pneumonia, as well as dysentery and diarrhœa, which belong more properly to malarial fevers. In 1880 there were 987,220 deaths due to fevers—i.e., 23·11 per 1000, or 23 out of every 29 deaths. The great increase in this mortality—1877 to 1880—was largely due to scarcity of food, and probably also to changes of temperature, cold and damp, and dampness of the soil, the result of irrigation throwing more water into the subsoil than was needed for growing crops.

Etiology of Fevers: Nature of Malaria.—Much is attributed to climate which is more properly chargeable to defective hygiene and careless mode of living. Malaria prevails almost universally in India, and there are extreme vicissitudes of temperature and endemic causes of dangerous diseases. But with care, temperate living, and ordinary precautions as regards exposure to heat and to obvious causes of disease, the climate itself is less noxious than may be supposed. Malaria attains its greatest intensity in tropical climates; it is the cause of several forms of fever, and seems to be intimately connected with the etiology of hepatic disease, bowel complaints, and other morbid conditions. It prevails in Southern Europe, and still lingers in the fens of Lincolnshire, the marshes of Essex or Kent, and a return compiled by Dr. S. Mackenzie of cases of intermittent fever in the London Hospital during the past century showed how its prevalence, type, and mortality had diminished in the vicinity of London. Before Hippocrates wrote on epidemics it was known that people who lived in marshy districts were liable to suffer from intermittent fever. But it was not until the end of the seventeenth century that Lancisi, in Rome, wrote on marsh exhalations, and pointed out their connexion with these fevers, and called them paludal or marsh miasmata. The term "malaria" is more generally preferred, paludal being apt to mislead, as paroxysmal fevers are seen on dry, sandy, and rocky soil. Still, experience teaches that the presence of moisture, organic matter, and a temperature above 60° are generally requisite. Since the time of Lucretius it had been surmised that low organism might be concerned in its production. In 1866, Dr. Salisbury thought he had discovered it in a palmella, with cells and sporules of other fungi, to which he gave the name of germasma or ague plants. Mitchell, of Philadelphia, in 1859, endeavoured to show the cryptogamic origin (*American Journal of Science*, January, 1866). Balustra also discovered a species of alga in the Pontine marshes (*Comptes Rendus*, LXXI. No. 3, p. 235). Niemeyer ascribed malaria to low organisms. Harkness (*Boston Medical and Surgical Journal*, Jan. 14th, 1869) says that he has found the palmella and spores in the snow on the summit of the highest Alps, and that they may readily become mixed with saliva and urine from without, and have nothing to do with malaria. Klebs and Tommasi-Crudelli in 1879 announced the discovery, in the soil, water, and air of the Roman Campagna and marshes, of germs or sporules which are capable, under the influence of warmth (above 20° Cent.), moisture, and air, of rapidly developing into sporigerous bacilli, and it is stated that the bacilli or spores have been found in the marrow of bones, the spleen, and blood of persons dying of pernicious fever. These bacilli they consider to be malaria, and by experiments on rabbits with washings of soil or fluids in which the bacillus had been cultivated have produced in them the symptoms and morbid changes peculiar to intermittent fever. Tommasi-Crudelli, in a note published in the *Gazetta Medica Italiana*, Oct. 1880, gives the results of more extended observations in corroboration of the above, and states his belief that the rigors may be produced by the irritation of vaso-motor nerves by the bacilli in the circulation; that the febrile attack is due to the discharge of the bacilli from their special nidus in great quantities, and that their development and disintegration are accelerated by the high temperature, abundant nourishment, and oxygen of the blood. Several other observers have communicated malarial fever to dogs and rabbits by inoculating them with blood taken from malarial patients, and have found the bacillus abounding in the cold stage, disappearing almost wholly in the hot stage, leaving only traces of its spores, which in their turn produce a second generation of parasites. Kelsch and Kierer found that, in the liver and blood of Algerian patients dying of malarial cachexia, the red corpuscles became larger and then much diminished. In a case of quotidian there was a loss, in twenty-four hours, of more than one million red corpuscles per cubic millimetre of blood. In profound anæmia the number may fall from five millions to less than one million and a half. In the

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liver there is dilatation of the capillaries, with endothelial proliferation in the walls, and leucocytes and pigment-cells lodge in them. The hepatic cells become hypertrophied and increased in number. There is distension of the lymphatic spaces, and sometimes commencement of annular cirrhosis, these conditions tending to become chronic. Laveran found organisms in the blood of malarial subjects—cylindrical curved bodies, transparent, but with a pigmented spot, without movement, also cylindrical bodies about the diameter of a red corpuscle, containing pigment granules, presenting rapid movements. On the borders of the spherule were filaments in rapid movement, three or four times the length of the diameter of the corpuscles. There were also bodies of spherical or irregular form, transparent or finely granular, containing dark-red, rounded pigment grains. He regards it as a form of animalcule, which exists at first in an encysted state, and in the perfect condition becomes free in the form of mobile filaments. Further, the blood of malarial fever persons contains vacuolated red corpuscles, which appear to be pigmented leucocytes and free pigment granules. Laveran found them in 180 of 192 persons affected with various symptoms of malarial poison in Algeria and Tunis. They are not found in the blood of persons suffering from diseases not of malarial origin. Where they were not found it was when quinine had been previously taken. The addition of a small quantity of quinine to the blood destroyed the organisms. He thinks that during a pyrexial period the organisms probably sojourn in the internal organs, especially in the spleen and liver. After death from malarial disease, pigment granules are found in great numbers in the blood, and especially in the small vessels of the liver and spleen, even the marrow of bone and the brain substance are discoloured by their presence. These pigment granules, which may obstruct the capillary vessels, appear to be derived from the parasitic elements, which perish after death, and become unrecognisable. Dr. Sternberg, of the United States Army, has made experiments on the soils, water, and air of New Orleans. He found that a number of minute algæ, including bacteria of various forms, exist in the swamp mud, and that they could be cultivated in isinglass, which then acquires pathogenic properties. Some of the organisms found in swamp mud, and gutter water, and in human saliva, are capable of multiplying within the body of an animal; and the blood-serum and organs containing them acquire virulent properties. Among the organisms are some which closely resemble, perhaps are identical with, the bacillus malariæ. Still, there is no conclusive evidence that, when injected beneath the skin of the rabbit, they give rise to a fever corresponding with the ordinary paludal fevers to which man is subject. Dr. Sternberg does not accept the evidence adduced by Klebs and Crudelli denying that the results of inoculation of the bacillus are malarial rather than septicæmic. He adds, however, that there is nothing to prove that the bacillus, or some minute organism, is not the active agent in human malarial fever, and that many facts support the hypothesis, which requires, however, the *experimentum crucis* to be made on man himself. These researches, however, offer an explanation which corresponds with what we know of the mode of operation of malaria. First, that it occurs at certain heights, and that it is not necessarily connected with the presence of marshes, ponds, or rivers, nor with admixture of fresh or salt water, nor with the putrefaction of an organic substance. Second, that the production of malaria ceases when the air can no longer act on the soil, as when the most pestilential marshes cease to be so when there is plenty of water, or when the air is excluded by any interposing substance. Third, that a very moderate degree of humidity will produce malaria—some malarial soils, innocuous during hot and dry weather, becoming dangerous after a shower, and so in the case of the upturning of new ground or the cutting down of jungle. If these views be confirmed by further observation, as great an acquisition will indeed have been made to our knowledge, as that which revealed the true etiology and pathology of continued fevers in Europe. But other agencies may be at work and make it difficult to reconcile the facts with the operation of a specific poison. Great diurnal range of temperature, vicissitudes of climate, exposure to fatigue, hunger, exhaustion, combined with local causes that predispose to feeble health, are considered as sufficient to account for it. Although the air of marshes contains a variety of products not met with in the normal atmosphere, yet most careful examination has failed in the detection of any separate active principle. But it seems probable that some subtle agency, in addition to climatic influences, is at work, though what it is we cannot say. The theory of the material nature of malaria is, at any rate, a good working hypothesis. Fevers occur in India in districts of opposite character, and are absent in some parts where marshes, and other conditions presumably favourable to their existence, abound.

Reference was then made to the slight malaise experienced by some in damp localities, and its relation to malaria; to the autumnal recurrence in individuals who have suffered from tropical fever, neuralgia, and rheumatism, and vague malarial symptoms which disappear on change of locality. Malaria is the origin of most of the diseased conditions in Anglo-Indians who come home for the benefit of their health, and yet patients are occasionally seen, presenting the same appearances, who have never been in the tropics or exposed to recognised malarial influences.

Mode of Action of Malaria.—It is greatly influenced by local and climatic conditions, its activity increasing generally with proximity to the equator, and it may be prevalent on dry and sandy soil as well as in low-lying marsh ground. Water, however, especially when stagnant and near the surface, is the prime agent, and may not only determine its generation, but may hold it in solution. The natives of India believe the pools, tanks, and even streams flowing through jungle and marsh to be charged with fever poison, and many believe the milk of buffaloes and cows fed in these places also contain it. Malaria is more active near the surface of the ground, and ceases to exist above certain altitudes, from 1500 to 5000 feet above sea-level. The top of a hill or even the upper room of a house is less dangerous than the ground-floor. It moves like mist and rolls up the hill-sides, and may travel with the wind for miles, its progress being arrested by water, especially salt water. Crews of ships lying to leeward of a malarious shore have been affected by the off-shore wind, and it is said that ships have generated it from cargoes of green wood, coals, or other vegetable matter, or rotting timber and bilge. Steeping of hemp, jute, indigo, and other vegetable matter has had similar effects. Burning fires and a belt of trees will arrest its progress. The eucalyptus is thought by some to have an antagonistic power. It is more active at night than in the day. It affects the weak sooner than the strong, the phlegmatic, lymphatic, or melancholic, rather than the sanguine or nervous temperament; the sickly and ill-fed, sooner than the robust; it spares no age; new-comers are more liable to suffer than those who have been acclimatised—it affects all races; but it would appear that the negroes in some parts of the coast of Guinea acquire a toleration. There are certain tribes which acquire some immunity; the non-Aryan races, who inhabit Assam, suffer, it is said, to a greater extent from malarial disease than the Aryans in the same province. The Tharoos live where it would be death to others, but even they are not altogether exempt. It is very intense in the belt of low, forest, swampy ground at the foot of the Himalaya mountains, where a porous soil has a substratum of clay, by which the water is brought near the surface, and where there are dense vegetation and a high temperature; in certain jungle districts and water-logged land, and where the tides encroach, in the river valleys, deltas, and debouchures of rivers, near rice and other cultivation, though the danger from fresh rice cultivation is probably exaggerated; in the Sunderbunds of Bengal, where the mud is covered with dense jungle and frequently washed by the tide; the jungles lying at the foot of hill ranges and along the sea-coast, where salt and fresh water mingle, and where organic matters decompose in moisture and heat. But it is scarcely less active on the arid ground of the Deccan, Sind, Bicaneer, Peshawur, the Punjab, and Bhawulpore; but even in these localities stagnant subsoil, damp, and organic matter seem to be at the root of it; though there are localities, too, it must be admitted, that seem so dry and devoid of vegetation, and with the water at such depths below the surface, that it is difficult to believe the explanation holds good, as it probably does; for though there may be no great quantity of moving subsoil water, the subsoil is impregnated by a certain amount of stagnant moisture, which is probably the worst of all. The worst malarial dysentery that I have ever seen followed such a clearing during the last Burmese war. Localities in India now comparatively healthy were once dangerous. Malaria is at its height in the drying-up season after the rains and the beginning of the cold season; whilst in the dry hot weather, and during heavy rains when the ground is covered with water,

or when the land has been for some time cultivated and populated, or covered with trees, it is less severe. Volcanic, rocky, sandy, granitic soils or surfaces, have been thought to produce it, but it is impossible to ascribe it to any particular soil—every condition appears to give rise to it. Some authorities—as Heyne, Martin, Kuler, and others—attribute influence to the nature of rocks, limestone, and ferruginous granite, but Indian experience supports the view expressed long ago by Pringle, that the chief determining cause is stagnant subsoil water at certain temperatures, to which must be added a certain combination of air and decomposing organic matter, in which animal as well as vegetable matter takes a share.

Distribution of Malaria in India.—No part of the empire can be said to be exempt, except some hill stations about 4000 ft. or 5000 ft. Registration at present is too imperfect to define clearly the actual intensity in any region. According to mortality returns (of fever) for five years, 1875 to 1879, it was most intense in the north-west provinces, Oude (including Terai), next in Berar, then the Central Provinces, Punjab, Bombay, Madras, and last in Bengal and British Burmah. The manifestations of malaria differ in different districts. Thus the malaria of the Terai or Sunderbunds will cause dangerous remittent; that of the general surface of Bengal, ague or remittent; that of colder climates, a variety of indefinite complaints rather suggestive of general ill health than of any specific disease. Contrary to what might be expected, the natives suffer more than Europeans in India—no doubt on account of the unfavourable conditions under which they live. Fifty years ago Europeans died of fever at the rate of 13·25 per 1000; in ordinary years now less than 3 per 1000 die, and there is reason to believe the mortality will be still further reduced.

Seasonal Prevalence.—What Celsus, quoting Hippocrates, said of Europe applies to India, "Igitur saluberrimum ver est, proxime deinde ab hoc hiemis; periculosior æstas; autumnus longe periculosissimus. Ex tempestatibus vero optim, æquales sunt sive frigidæ, sive calidæ; pessimæ quæ maximæ variant. Quo fit ut autumnus plurimos opprimat." In the hot months, March till June, fevers partake more of the continued and ardent form; they are apt to prove dangerous and fatal from cerebral complications, and seem pathologically linked with ephemeral on the one hand and with ardent fever on the other, differing only in degree. They are due to over-heating, and are liable to be modified by the malaria. In the rainy season in Bengal intermittent, remittent, and continued type occur, and dysentery, with a tendency to bowel complaints. After the rains, during evaporation and drying up, fevers of the malarial type become numerous and active; when the cold season sets in they also occur. Alternation in temperature and moisture, especially in the early part of the cold season, before the system becomes habituated to the change, promote and develop attacks of fever, especially in the weak, anæmic, or exhausted. How such changes are re-excited in those who have previously suffered is well known.

Effects of Malaria on Man.—In addition to the direct effects of malaria, a diathetic condition seems to be established which modifies other diseases. The effects of malaria are, indeed, most protean in form, not only in its own definite and well-marked pathological processes, but it simulates others. The stupor of typhus, the collapse of cholera, the high temperature of insolation, the sickness of an irritant poison, the convulsions of epilepsy or of dentition, may occur in the pernicious forms. It induces anæmia and general cachexia, with structural changes in the liver, spleen, or other viscera. Neuralgia, asthma, and various other symptoms of disturbed innervation and sanguification, and it also appears to be in close etiological relation with dysentery, cholera, diarrhœa, beriberi, hydrocele, elephantiasis, bronchocele, or hepatic disease. Whatever its nature may be, its action on the human economy is very striking; it affects the central nervous system, causing disturbance of vaso-motor action, paroxysm of fever, and congestion of the abdominal viscera, which may become periodic in recurrence, or pass on to structural changes in the liver and spleen, or intestinal mucous membrane. No one can have resided long in a malarious climate, such as Assam, without observing the cachectic, deteriorated aspect of the people, who, although they may never have had a single attack of fever, scarcely feel ill, and would resent being told so, are yet victims to the insidious action of the poison, and present evidences of anæmia, degenerate tissues and chronic visceral disease.

Gulstonian Lectures
ON
PULMONARY CAVITIES; THEIR ORIGIN, GROWTH, AND REPAIR.

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LECTURE I.—PART II.

I HAVE attempted roughly to describe the leading varieties of disease in which cavities originate. I would invite you now to a review of the situations which they affect. The practical importance of this topographical study is best demonstrated by the advantages which have been gained from a knowledge of the few facts which we already possess relating to the position of cavities. I would specially allude to the clinical results obtained from a recognition of the great preponderance of apex-excavation over cavities in other situations. In any case of suspected phthisis our examination is first directed to the apices, and from a negative result we acquire the certainty that the patient is not the subject of advanced disease. Theoretically there is a rashness in this conclusion; but in practice our induction ceases to be rash in virtue of its scientific basis, for the upper part of the lung has been proved to be almost invariably the seat of the early pulmonary disease. By a due regard to this acquired fact we are saved much superfluous labour, and not a little unnecessary doubt in forming an opinion.

An inquiry into the causes of this frequency is not foreign to my subject. How great an importance has been attached by former writers to an elucidation of this point may be perceived from the number and variety of the theories to which it has given rise in the literature of phthisis. The causes which have been suggested may be arranged under two headings: (1) postural; (2) functional.

1. Lebert connects the frequency of apex-cavities with the peculiarities of posture in man; during the day erect, at night generally supine. In what manner the erect posture exerts its influence he does not proceed to explain; but with the supine position at night he couples the frequent development of cavity at the posterior aspect of the lung. His arguments in favour of the "postural" theory are supported by observations in comparative pathology. From a careful study of phthisis in monkeys he concludes that the apex is not specially liable to the disease in these animals. The close analogy of structure between man and ape renders this fact of special value.

The explanation adopted by Rindfleisch, which we will presently discuss, is also based upon the influence of posture. To the same order may be said to belong the suggestion that the apex of the lung is specially exposed to the agency of cold. From clinical observers this view has received no small share of support; we still lack conclusive evidence that the parts of an organ struck by the impression of cold are invariably the seat of the resulting inflammation.

The other causes suggested by authors are mainly functional or anatomical. First among these is the alleged inequality of function at different regions of the lung. From a teleological standpoint, there would be a palpable improbability in the assumption that any part of an organ should remain permanently deprived of function; but it must be admitted that varying degrees of activity may exist not only in different parts of the same organ, but at different times in the same part. The view sometimes put forward, that the air-cells at the apex are larger than those at other parts, requires to be confirmed by practical observation. A demonstration of any such difference in the human subject is surrounded with great difficulties, owing to the possible interference of irregular inflation, of emphysema, and even of post-mortem distension. Dr. Waters, in his Fothergillian Prize Essay on the Anatomy of the Human Lung, denies the existence of any variation in the size of air-sacs in different parts of the same lung.

Greater probability attaches to the view that peculiarities in the bronchial supply may influence the frequency of the apex disease. Among the features special to the bronchial distribution at the apex, the relatively larger size of the tubes, and their rigidly patent and circular orifices deserve to be noticed. But further study is required before any etiological conclusion can be based upon the anatomy of the bronchial system.

The occurrence of pleurisy at the apex has also been advanced as a determining agent. Among other considerations, the frequency with which pain is referred to the clavicular region at an early stage of phthisis lends colour to this view, although after death the recent pulmonary deposits are often uncomplicated by pleural adhesions.

Before entering further into this etiological discussion, it may be well to sift the evidence as to the exact site of the so-called apex-disease. In the later stages of pulmonary consumption, it must be conceded, the vomica commonly extends to the summit of the lung. It is habitual, however, even at this stage, to find the cavity lateral rather than median in its axis; and I may state at once that the extension of a cavity to the periphery is mainly a matter of time. We cannot, therefore, with safety, conclude from the size and position of the late cavity to the size and situation of the earlier disease. Clinical observation supplies us with valuable evidence in our endeavour to settle the question. A careful diagnosis will not fail to convince us that the early consolidations are more commonly seated in the subclavicular region than at the apex. The same fact is often capable of direct demonstration, when at the time of death one of the lungs is as yet but slightly affected. I do not wish to underrate the clinical value of an examination of the supraclavicular space. This is undoubtedly a position in which the signs of the disease are very early perceptible; but I have not encountered breaking-down in this situation with as much frequency as in the inner or in the outer subclavicular region.

With this reservation, I would proceed to discuss the etiology of the apex lesions. I hesitate to attribute to posture so direct an influence on the localisation of phthisis as is implied by Lebert and by Rindfleisch, and I would look rather for the operation of functional causes. We must assume that all parts of the lung are endowed with breathing capabilities proportionate to their amount of spongy tissue. It would be inconsistent to suppose that any one part of the lung is in this respect at a relative disadvantage. On the other hand, we cannot fail to recognise that the type of breathing normally differs in the various districts. More than any other, the upper region of the chest is the seat of voluntary respiration, as opposed to automatic breathing; and the enlargement of the thorax by drill probably occurs to a greater extent in this than in any other part. In this observation we possess a proof that the breathing powers of the apex are not far behind those of other regions; but also an indirect proof that, under ordinary circumstances, this breathing power remains imperfectly utilised. During the bulk of our existence, respiration at the apex is decidedly sluggish; and, even in the female type of breathing, the pectoral region, rather than the apex proper, is the seat of respiratory activity.

Just as attention and training, combined with exalted vital energies, can effect an improvement of the apex breathing, impairment of function will follow upon a general loss of tone. Even in conditions of fatigue, depression of apex breathing is perceptible. In the initial stage of phthisis the depression to which I have referred is extremely striking. At this stage an inspiration sufficient to raise the subclavicular region to the normal extent may become a matter of considerable effort, and whilst the patient breathes quietly no appreciable forward thrust of the ribs is obtained; yet the lower and more elementary mechanism of respiration, that of the diaphragm, remains in nearly unabated activity.

Viewed in this broad manner, the theory of unequal function as a determining factor in the localisation of early phthisis commands my adhesion. The direct outcome of such a condition of lessened respiration is doubtless lessened aeration of the blood; but local effects yet more important are apt to follow. Greater than the loss of inspiratory vigour is the loss of an efficient expiration. We can scarcely over-estimate the value of expiration. It shares with inspiration an influence over the circulation, which may be with accuracy compared to the action of muscular contraction in assisting the passage of blood through the muscles, and it possesses a similar influence over the lymphatic currents in the lung and pleura, as pointed out by Dr. Klein ("The Anatomy of the Lymphatic System," Part II., The Lung, p. 18). But it is upon the bronchial system that expiration exercises its most beneficial influence. In the absence of good expiratory power the tubes cease to be cleared of their contents; and, under the influence of the impairment in the general tone of the bronchial membrane, their secretion becomes abnormal in quantity and in kind. These are tangible results, by the side of which we are led to suspect as highly probable a lessened vitality of the parenchyma and a disturbance of the vaso-motor mechanism.

The stagnation in the tubes of the apex is explained by Rindfleisch in a somewhat different light. Rindfleisch, in his first proposition, states that the secretions of the apex are thicker than those in any other part of the lung. The inspissation would be due to a relative dryness of the apex structures, caused by a subsidence of the blood within the vessels, in accordance with the laws of gravitation; but the mechanical explanation given for the gravitation of blood towards the base is weakened by an omission of the most important among the normal conditions of the vessels. The pulmonary vessels are not only elastic tubes, but tubes embedded in an elastic tissue, which is never quite free from tension. In the variations of the pulmonary tension, and on the other hand, in the varying contractility of the small vessels, are to be found the real moderators of the circulation. Leaving out of consideration the slight suction which intermittently arises in the large intrathoracic veins, I fail to discover, in the supposed emptiness of the latter, a force capable of materially influencing the contents of the capillary system.

The minor details to which I have alluded in the theory supported by Rindfleisch are, in my estimation, less important than its leading idea. The drift of the theory is to refer apex-disease to local anæmia as a cause. With such a conclusion, I feel that much of our clinical and much of our post-mortem experience will be hard to reconcile. The derivation of any such view from clinical observation would have appeared to me almost impossible. With better excuse, it might have been urged from a contrast with the immunity from phthisis conferred upon the lung by the chronic congestion of mitral disease. The rarity of the occurrence of phthisis in those suffering from mitral insufficiency is generally admitted; but the cause of this peculiarity does not, I would suggest, reside in the large amount of blood contained in the lungs, but rather in the degree of intravenous pressure. It is rational to suppose that the pressure kept up in the vessels by persistent regurgitation may act upon the endothelial membrane to an extent which would discourage the soft cell-growth characteristic of phthisis. Assumption, however, is superfluous in this case. We possess, with regard to the pathology of venous obstruction, a rule which is of universal application. In the liver, in the spleen, in the kidney, interstitial fibrosis is the invariable result of mitral disease. This condition is also induced in the lung from the same cause—thus the antagonism is not between phthisis and congestion, but between fibrosis and phthisis.

For my part I believe congestion to be never absent from the earliest phases of pulmonary phthisis; but, unlike the mechanical congestion of mitral disease, I hold blood-fulness to be here the expression of a local loss of tone. It is comparable to the congestion present in relaxed states of the tonsils and in subacute pharyngitis, and it is similary coupled with hypersecretion and with cell-overgrowth. This local retardation of blood is directly induced by an impairment of the aerial traffic; for we have seen that regularity and fulness of breathing are essential to the thoroughness of the circulation. Excessive collapse of the alveoli, and their excessive distension, alike constrict the capillaries. Congestion is, on the other hand, most favoured by a state of flaccidity equally removed from either extreme. Of the existence of some degree of congestion as an early condition we possess clinical evidence, if we are to trust to the usual interpretation of the auscultatory sounds. Anatomical proofs of the same fact are not wanting: lobules are frequently found in a congested state which are unmistakably attacked by an early pneumonic catarrh, and in other regions we recognise indelible traces of former congestion in the black pigmentation of the lobule.

To sum up my views as to the etiology of apex-cavities, I look upon the latter as late consequences, in subjects pre-

disposed to phthisis, of alterations at first purely functional—namely, imperfect thoracic movement—imperfect ventilation of the apex, which results in imperfect vascular tone—and, finally, sub-inflammatory congestion. These conspiring elements are well calculated to awaken in the tissues the dormant predisposition to endothelial proliferation, which is at the root of the phthisical habit. With the progress of the cell-growth and of the alveolar distension, a secondary anæmia is induced; but the persistence of the bronchial congestion, and the limitation of the deposits to lobules, clearly show that the disease is determined by the local factor of lobular congestion.

The arguments which I have ventured to put forward in discussing the etiology of cavities at the apex derive welcome support from the rarity of *vomicæ at the base*, where the respiratory conditions are widely different. Primary phthisical excavation at the base is almost unknown in the human subject. The diaphragm is the most automatic of our respiratory muscles, and, as such, unceasingly active. Hence the base, which it can be scarcely doubted is more immediately under the influence of the contractions of the diaphragm, is also more constantly and more perfectly ventilated. This difference, noticeable in ordinary respiration, is yet more strongly marked in the exaggerated breathing which accompanies cough. It should also be noted that the relatively greater mobility of the inferior wall of the thorax often persists, even in the presence of adhesions; whilst in the upper part of the chest adhesions lead to a more rigid fixation.

Another important factor not to be overlooked in estimating the comparative respiratory powers at various sections of the lung, is the relative bulk of spongy tissue. The upper part of the lung, which contains the bronchial tree and the large division of the bloodvessels, is proportionately poor in alveolar tissue. At the base, where spongy tissue makes up the great mass of the lung, the total strength of the bronchial air-current is likely to be increased, and the respiratory excursions of every constituent part are decidedly amplified.

So rare is the occurrence of primary phthisis at the base, that the evidence pointing to excavation in this situation must be weighed with extreme caution; a searching examination not infrequently proves that cavernous sounds are merely conducted to the base, which at first were deemed strictly basic. When the existence of excavation limited to the base is capable of demonstration, its origin will generally be found to be distinct from phthisis.

Among the causes leading to cavernous sounds in this situation, bronchial dilatation probably holds the first rank; in suspected bronchiectasis, we should never fail to inspect the region immediately below the angle of the scapula, as one specially obnoxious to the disease. Gangrene as a source of excavation is especially common at the base in connexion with the relative frequency of basic pneumonia; and empyema leading to pulmonary cavity is equally prone to affect the lower part of the chest.

Syphilis should not be omitted as an occasional cause of basic disease; vomicæ due to this affection may be the result of the softening of a gumma or the secondary consequence of ulceration within the bronchi. The relative frequency with which syphilitic lesions are described at the base is doubtless due to the difficulty which commonly attends a distinction between a specific affection at the apex and the ordinary results of phthisis. It is not improbable that vomicæ due to syphilis are as often apicial as basic. Schnitzler, however, regards the middle and lower lobes as the seat of election for this disease.

Among the many causes which may be classed as accidental the most important in respect of frequency is the extension of abscesses from neighbouring regions, from the peritoneum, from the liver, from the spleen, or the kidney. Hydatids constitute a separate group of great interest; they may originate within the thorax, or more commonly they make their way upwards from the liver. The impaction of foreign bodies in the lower bronchial divisions occasionally leads to excavation, as in a remarkable case narrated by my friend Dr. Mitchell Bruce in his instructive lectures on Basic Cavities, at present in course of publication in the *Practitioner*. Lastly should be mentioned, although not least important, the softening of the hæmorrhagic nodules, described by Dr. Reginald E. Thompson, which will form the subject of some further description in my next lecture.

With the exception of the last, the diseases which I have enumerated do not strictly fall within the territory of phthisis, although phthisis too often becomes developed in their later stages, and for this reason I reluctantly refrain from any further comments concerning them. This deficiency will be amply supplemented by Dr. Bruce's lectures, which contain a more practical treatment of the whole subject than could have been attempted by me.

Beyond a recognition of the frequency of cavities at the apex, and of their rare occurrence at the base, the *topography* of cavities does not appear to have been hitherto specially studied. With a view to supplying some material towards a better knowledge of this subject I have made careful post-mortem observations in a series of 152 consecutive cases of phthisis, including five cases of bronchiectasis, and I propose bringing this lecture to a close with a review of the results which I have obtained in connexion, first, with the size, and, secondly, with the position of cavities.

1. In respect of size the following gradations were noted:—The transformation of a whole lung (with the exception of very small surviving portions) into a single cavity was observed in five cases (three on the right side, two on the left). In addition to these the left side furnished three other instances of very considerable disease, both lobes being converted into very large cavities, which intercommunicated through a perforation in the septum, thus very closely approaching a condition of total excavation.

Excavation of the whole upper lobe occurred in twenty-six cases. These lobar cavities were situated:

On the right side,	On the left side,
12 times;	14 times = 26.

Including the 5 cases of total destruction of a whole lung which I have mentioned, the interlobar septum was perforated by ulceration in 23 cases, the lesion occurring:

On the right side,	On the left side,
10 times;	13 times = 23.

The size of the perforations varied considerably, between the diameter of a goosequill and that of the lung itself. In all these cases the excavations were large, and in most the ulceration appeared to have been induced by the downward extension of the cavity from the apex.

For the great bulk of the remaining cases, where excavation did not implicate an entire lobe, standards of comparative measurement were selected in the average-sized Seville orange, in the Tangerine orange, and in the ordinary walnut; and the cavities were arranged in three corresponding groups.

To the first group, comprising cavities as large as, or larger than, the ordinary orange, belonged 79 of the cases; the position of the cavities was as follows:

On the right side,	On the left side,
53 times;	54 times = 107.

Large cavities existed, therefore, simultaneously on both sides in 28 of the cases.

In the second series, numbering 52 cases, the cavities ranged between the size of a Tangerine orange and that of a walnut. They were found respectively:

On the right side,	On the left side,
42 times;	38 times = 80.

Thus, in 28 cases, both sides were simultaneously excavated (not including several cases in which simple softening existed in the lung least diseased). The usual site of these cavities was the upper lobe; this, however, was not invariably the case; for, in 9 instances, the larger cavity was situated in the middle third of the lung.

In a third series of 19 cases the cavities did not exceed the size of a walnut; with 4 exceptions, they acquired a larger size at the apex than in the lower lobes. In most of these instances, although the vomicæ were comparatively small, the extent of the softening was considerable, and the disease implicated larger portions of the lung than in cases where the cavities attained more important dimensions.

It is unnecessary that I should add any comment to the simple statements which I have enumerated. The figures speak for themselves; they bring into relief the remarkable evenness with which right and left sides are affected. They also point to a great tendency in the cavities of chronic phthisis towards a progressive enlargement; and they show plainly that the severity of the disease cannot be estimated by the magnitude of the vomicæ.

2. If we pass to a consideration of the topography of cavities, we find, in corroboration of the results of other

observers, a great predominance of disease in the upper part of the lung. Thus in the whole series, the *apex* presented:

Complete absence of disease	in 4 cases.
Pneumonia or blood-deposits (without excavation)	,, 3 ,,
Tubercular masses (without excavation)	,, 3 ,,
Tubercle and pneumonic masses (without excavation)	,, 1 case.

In all the remaining instances, excavations existed at the upper part of the lung. I have abstained from a more elaborate analysis of this region, partly having regard to the uncertainty which exists as to the real limits of what is termed the apex, and partly also from a consideration of the fact that, in chronic cases, the upper part of the lung rarely fails to become finally involved, although not always diseased from the first. It should, however, be stated that the outer region of the apex is found far more frequently than the inner region to be the seat of late excavation.

The *base* afforded a remarkable contrast to this frequency of the apex-disease. In the aggregate of 304 lungs, 32 only presented the features of basic excavation; and at least one-third of these cavities were mere extensions of cavities beginning in other regions, especially in the axilla. Tubercle, both of the sporadic and of the grouped variety, occurred with tolerable frequency. But the deposits more specially characteristic of the base were of non-tubercular nature. They consisted either of hard nodules, such as those described by Dr. Reginald E. Thompson as hæmorrhagic, or of the softer masses which are so commonly found at the fringe of the lung as one of the latest results of phthisis. It may be incidentally stated that both the hard nodules and the soft masses are liable to break down; and, if surrounded by the pneumonic œdema which is habitually induced at the base during the last few days of life, they may become the starting-point of extensive disorganisation.

The great frequency with which the *sternal region* escapes disease will be gathered from an inspection of the following table:—

Sternal Region.

	On the right.		On the left.		Total.
Absence of lesions ...	71	...	66	...	137
Excavation by extension	9	30	16	31	61
Separate cavities ...	21		15		
Bronchiectasis ...	6	...	3	...	9
Fibrous changes (only)	12	...	16	...	28
Pneumonia (only) ...	6	...	7	...	13
Tubercle (only) ...	6	...	5	...	11
Hæmorrhagic nodules (only)	4	...	9	...	13
Other nodules (only) ...	17	...	15	...	32
	152		152		304

The sternal region in its lower portions closely emulates the immunity of the base, but in its upper part it is liable to suffer from the extension of vomicæ from the apex and from the mammary region. It further resembles the base in preserving its spongy nature to a late period (thus acting as a reserve of breathing tissue), and in showing a liability to the late nodular deposits which I have mentioned above; but probably owing to its position in the chest and to its vascular relations, it is less subject to the thrombosis and to the pneumonia which so commonly overtake the base.

The *mammary region* forms the subject of the next table, to which I would direct your attention:—

Mammary Region.

	On the right.		On the left.		Total.
Absence of lesions ...	14	...	20	...	34
Excavation by extension	38	95	45	94	189
Separate cavities ...	57		49		
Fibroid condensation (only)	18	...	18	...	36
Bronchiectasis (only) ...	3	...	2	...	5
Tubercular and nodular deposit in the absence of excavation ...	22	...	18	...	40
	152		152		304

The facts expressed by these numbers are briefly the following:—

The mammary region escapes disease but rarely (in a proportion closely approaching 1 to 9) in cases of advanced phthisis. Excavation, on the other hand, does not occur in more than one-third of the cases. Whether taken separately or in their aggregate, the various figures relating to this region show once more very strikingly the uniformity with which disease affects both sides of the chest. It will be noticed that cavities are more apt to be formed in the left mammary region than in the right, but the latter is more frequently the seat of separate excavation. This difference is partly to be explained by the smaller size of the left lung, and by its anatomical relations, which restrict its expansibility. The greater respiratory surface possessed by the same region in the right lung finds another demonstration in the relative frequency of nodular and tubercular deposits as compared with the left.

A more exact localisation of the vomicæ in the mammary region was attempted in fifty-three of the cases only. The central mammary region yielded thirty-one cavities, and the outer nineteen, against three cavities referable to the inner portion of the same district. These numbers are too small to warrant any conclusion beyond the fact that the inner pectoral region is not favourable to excavation.

The *dorsal aspect* of the lung, owing to the space occupied by the vertebral column and mediastinal structures, on the one hand, and by the root of the lung on the other, is comparatively of less extent than the anterior surface. The portion corresponding to the vertebral groove is not specially prone to disease; it is commonly found yet spongy when the mass of the organ is disabled. Excavation in this situation is one of the latest events, and not infrequently is due to the softening of loose masses of irritative pneumonia, such as I have described at the base. Of the remaining portions of the posterior pulmonary surface, the upper and the lower have been included respectively in the description of the apex and of the base; and the *mid-dorsal region* I would now propose to consider in conjunction with the *axillary district*, with which it is closely connected in the march of the disease. In this section of the lung the following results were obtained from a study of my 152 cases:

Dorso-Axillary Region.

	Right.	Left.	Total.
Absence of lesions	14 ...	15 ...	29
Excavation	111 ...	116 ...	227
Fibroid changes (only)... ...	1 ...	2 ...	3
Compression (only)	— ...	1 ...	1
Pneumonia or caseation (only).	2 ...	1 ...	3
Œdema (only)	1 ...	— ...	1
Caseating tubercle (only) ...	— ...	3 ...	3
Dry tubercle (only)	18 ...	7 ...	25
Nodules (including hæmorrhagic deposits)	5 ...	7 ...	12
	152	152	304

We gather from this table a knowledge of the remarkable proneness to disease peculiar to this region, and of the yet greater proneness to excavation. As in the other parts of the lung, the two sides show but little difference. The excess in the number of cavities in the left axilla, and of tubercle in the right, is probably correlated with the relatively larger extent of breathing-surface at this section of the chest, on the right than on the left side, whereby the secondary excavation is comparatively delayed in the right lung.

In conclusion, I have prepared for your consideration a tabular statement of the frequency of excavation in the various pulmonary regions, derived from the tables given above.

Regional Frequencies of Excavation in 304 Lungs Examined.

Excavation at the apices	282
,, ,, dorso-axillary region ...	227
,, ,, mammary ,, ...	189
,, ,, sternal ,, ...	61
,, ,, base	32

The most striking fact revealed by this table is the high proportion which the dorso-axillary excavation bears to the total number of cases of chronic phthisis. I doubt whether clinical observations have hitherto led to so high an estimate of the frequency of the lesion. A knowledge of this pathological fact cannot fail to stimulate a more searching clinical exploration of a region so liable to disease, and to strengthen the conclusions which our diagnosis may derive from physical methods of examination. I will defer until my next lecture a discussion of the pathological meaning, and of the etiology of excavation in this district. My present object was merely to call attention to the existence in the dorso-

axillary region of a special tendency to excavation, to point to the clinical value of a due appreciation of this peculiarity, and to submit to you, as an apology for the dry facts with which your patience has been tried, a practical proof of the assistance which anatomical study may render to diagnosis.

NOTE ON THE

SANITARY CONDITION OF BAGSHOT PARK.

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IT has been suggested to me by His Royal Highness the Duke of Connaught that, as a matter of general interest to the medical profession, I should communicate a brief notice of the careful investigation and report made by Mr. Rogers Field into the sanitary condition of Bagshot Park, the defects in which are believed to have led directly to the Duchess of Connaught's late serious illness, from which she is now happily entirely convalescent. This is a suggestion I willingly comply with in the hope that so prominent an instance of the danger that may arise from such faults of construction and workmanship as have been proved to exist may have the effect of directing attention to the paramount importance of questions of this kind.

It may be well to premise that the present house at Bagshot Park is not that long occupied by the late Sir James Clark, but an entirely new building, recently erected at a cost of from thirty to forty thousand pounds. As a matter of course, considerable pains were taken in the arrangement and ventilation of the drains; but it appears that not only was the system adopted in itself defective, as was pointed out at the time of construction by Sir Howard Elphinstone, R.E., the Comptroller of His Royal Highness's Household, but that the work was in many instances so carelessly carried out that it is a matter of astonishment that more grave results have not followed. It is impossible to describe the whole system of drainage without reference to plans; but a few examples of the faults will show how readily, even in a new and costly mansion, the inhabitants may, without suspicion, be exposed to risks, the extent and subtlety of which it is difficult to estimate. For this purpose I quote from Mr. Field's report, which has been placed in my hands. This was made after a thorough investigation conducted subsequently to Her Royal Highness's removal to Windsor, and it reveals a state of things which renders it astonishing that much more serious consequences did not long since arise. As a matter of fact, offensive smells had long been perceived about the house, and had been a common topic of conversation; but no one had suspected their origin, or had realised the dangers they were likely to cause. Many of the inmates, however, had suffered from various forms of indisposition, such as sore-throat, diarrhœa, and a general sense of heaviness and malaise, and these chiefly affected new-comers. Of all this, it is needless to say, I knew nothing until after the Duchess's accouchement; neither did Dr. Laking nor I think much of it until serious symptoms showed themselves.

A few examples of the defects discovered will suffice to show what was really the state of the sanitary arrangements:

"The drains taking certain baths and sinks run underneath the house with two chambers in their course, likewise underneath the house; connected with these bath drains are several land drains constructed with ordinary jointed pipes. This, I need hardly point out, is a very objectionable arrangement, as the bath drains are in unbroken connexion with soil drains, the unventilated trap forming no reliable security against the passage of foul air."

All the drains inside the house, and immediately around the house, "were found, without exception, to be leaky, some of them exceedingly so."

On testing the drain, taking the soil pipe from one closet "water ran out of the pipe through the wall into the basement, and on opening up the pipe, just outside the wall, it was found to be not only badly jointed but broken, and there was an accumulation of filth which had run from it into the ground."

"The bath and sink drain under the house was so completely stopped up with a slimy deposit that it was some time before any water could pass down it."

"All the closets had a disagreeable smell, and some of them were excessively offensive."

"On examining the basement on his first visit, my assistant noticed a vertical pipe communicating directly with the soil drains. On inquiry, he was informed that this pipe was intended for a sink which had not been fixed; and he was assured by the clerk of the works that the upper end of the pipe had been cut off and carefully sealed up. It was afterwards discovered that there had been no attempt at sealing up the pipe, but that the upper end had been left open immediately under the floor of the vestibule, and this afforded a free passage for foul air into the house."

"The water pipes of the baths are in unbroken communication with the drains, instead of discharging with open ends outside the house as they should do. The waste pipes of the sinks have unbroken connexion with the drain in the basement."

The following is specially interesting under the circumstances which led to this investigation:—"In order to ascertain how far the smell from the leaky drains and rain-water overflow in the basement would penetrate I applied the smoke test, by burning specially prepared paper in the basement under the central saloon, study, waiting-room, and vestibule. The smoke was seen to issue in great volume from the hot-water coils in the saloon, and a strong smell of smoke was perceived in the study, waiting-room, and vestibule. It was also proved that the smoke passed from the saloon into the Duchess's bedroom. Again, on burning the special paper in the hollow wall at the back of the heating furnace, the smoke found its way into the dining-room, up the casing of the soil-pipe into the Duke's dressing-room, and thence into the Duchess's bedroom. From the foregoing tests it will be seen that there were two distinct and easy ways by which the foul gases from the drains in the basement could find their way into the Duchess's bedroom."

I have quoted a few only of Mr. Field's discoveries, but these, I think, will amply justify his general conclusion that "the construction of the drainage, both round and inside the house, is very defective. This faulty work is undoubtedly the cause of the offensive smells that have been noticed, and the defects are so grave that I consider the house in its present condition unsafe for habitation from a sanitary point of view."

The whole question of the effects of defective sanitary conditions on the puerperal state is one which deserves much more serious study than it has ever yet received. I have long been satisfied that they have often much to do with grave forms of illness in the lying-in state, the origin of which cannot otherwise be traced. In the chapter on "Puerperal Septicæmia," in the third edition of my work on "The Science and Practice of Midwifery," I write as follows: "Exposure to sewer gas may, I feel sure, produce disease. In two cases of the kind I had the opportunity of closely watching, an untrapped drain opened directly into the bedroom, in one instance into a bath, in the other into a watercloset. Both cases were indistinguishable from the ordinary form of the disease, and in both improvement commenced as soon as the patient was removed into another room."

The two cases here mentioned are by no means the only ones I have had an opportunity of observing; and I have long had it in my mind to direct more marked attention to this topic. In a case I saw some years ago in Notting-hill, which I referred to in the discussion on Puerperal Fever at the Obstetrical Society, the patient, who had been confined within a week, had all the symptoms of a most intense attack of puerperal septicæmia, but none of a diphtheritic character; while her husband lay in an adjoining room suffering from a diphtheritic sore-throat. Here the waste-pipe from the bath was found to communicate directly with the sewer. In spite of her intense illness I had the patient removed to her mother's house in Holland-park; and from that moment she began to improve. In August of last year I saw, with Dr. Parsons of Notting-hill, another similar case, in which the same source of disease was detected. Here again we had the patient taken away from the infected atmosphere into apartments in the next street, a step which was instantly followed by an amelioration in her symptoms. Besides these cases, I know of three others which ended fatally, in which I have every reason to believe that the cause of death was poisoning by sewer-gas.

On the case of Her Royal Highness it is impossible for me, for obvious reasons, to comment; this much, however, I may say, that very fortunately her symptoms did not commence for more than a fortnight after her confinement, when the influence of the puerperium was happily much lessened, and that her removal was, as in the cases above mentioned, immediately followed by a most remarkable and instructive change for the better.

George-street, Hanover-square, W.

A RECENT CASE OF SUICIDE.

By HERBERT J. CAPON, M.D.

ON Saturday, Dec. 3rd, 1881, I was called, about 5 P.M., to see Miss E. C——, barmaid at the "Criterion." She stated that she had been living with a gentleman, and that she was suffering from a discharge. I examined her externally, and found the labia markedly red, with some moisture on the sides, but not of gonorrhœal character. But as she said that the discharge was abundant, and that she had but just changed, I concluded that there must be something gonorrhœal about her, and gave her the usual treatment with lead lotion.

On the 5th she came to me, when I passed a speculum, and discovered a suspicious-looking sore on the anterior lip of the os uteri. To this I applied nitric acid and a plug saturated with black lotion, giving her a six-ounce lotion of the same sort, and an anti-syphilitic mixture.

At 7.45 A.M. on the 6th I was called to see her, and found her sitting up leaning over the back of a chair vomiting into a chamber placed on the floor in front of her, supporting her head with her hands, with her elbows resting on her knees. In the chamber was about a quart of green fluid, frothy, and smelling strongly of phosphorus, a powerful odour of which pervaded the bedroom. On the table was an empty bottle of phosphorus paste, and a pair of nail-scissors, which had been used for spreading the paste on sponge cake, portions of which lay strewed on the dressing table. Pulse 150, small, and very feeble; skin cold; aspect pinched and dusky. Her bowels had been freely moved. She stated that she had taken the phosphorus about 10 P.M. the previous night, and had been vomiting all night. She managed to attract attention about 7.30 A.M. She complained of much burning pain in back of throat and down the sternum and great thirst, and stated that she had subsequently to taking the paste swallowed six ounces of black lotion. I, believing her to be moribund, obtained a written statement from her, and also took charge of bottle, scissors, and two notes. I administered two ounces of castor oil, after which she vomited again; then oil of turpentine in forty-minim doses every half hour. Towards night her pulse became very small, and she appeared to be sinking, but she slept for three hours.

Dec. 7th.—She appears more refreshed. Pulse 96; temperature normal; has slight creeping sensations in both feet, and some pain in lower part of abdomen; pain in chest less; passed about two pints of urine, ale-colour, acid, and of usual odour; bowels opened twice, motions loose, shreddy, and of brown colour. Face flushed; tongue clean and moist; odour of phosphorus not perceived in breath. Taking milk well; also some beef-tea.

8th.—8 P.M.: Restless night. Bowels opened three times; motions liquid, dark, and offensive; urine in less quantity, passed with much pain, of the same character; nausea. Pulse 86; temperature normal; tongue slightly coated; breathing normal; tender over liver and region of right kidney, also over cæcum; occasional pain in lower part of abdomen; colour not so high.—11 P.M.: Thirsty; tongue coated with shining mucus. Temperature normal; pulse 84. Taking nourishment fairly well; restless; bowels open twice since last visit; motions chocolate-coloured and liquid; passed no urine; complains of much tenderness on going to stool.

9th.—Tongue more coated; bowels opened four times, motions pale brown, soft and acholic, much pain over liver; conjunctivæ somewhat yellow; restless night; very thirsty. Pulse 86; temperature 99°; passed about a pint of high-coloured urine, but no blood.—10 P.M.: Pulse 108; temperature 100·8°; maddening thirst; pain in throat on swallowing; aspect more typhoid; restless; bowels opened twice since morning.

10th.—Temperature 101°; pulse 96, feeble and soft; motions scanty, pale brown to putty coloured; urine high coloured (passed with motions). Much more yellow in conjunctivæ, mouth, and ears; erythematous flush on cheeks, nose, chin, and forehead, as if she had sat before a sharp fire. She complained of these parts being tense. Tongue more coated; painful deglutition, also defecation. Very restless night. Taken less nourishment.—5 P.M.: Temperature 101·5°; pulse 108; other symptoms much the same.—11.10 P.M.: Temperature 102·2°; pulse 126; very restless; constant desire to have bowels relieved; pain increased, and extending down gullet to bottom of abdomen; tongue thickly coated with white fur, tip red and dry; restless dozes. Takes less nourishment, and each article swallowed gives much epigastric pain; thirst increased.

11th.—Pulse 132, intermittent and very feeble; respiration 32; temperature 99·8°; aspect waxy and pinched; vomited about one ounce of blood mixed with milk and mucus; respiration catchy. Passed a restless night, but pain less (owing to sedative solution of opium).—10 P.M.: Pulse 120, temperature 99·8°. Vomited about two pints of black fluid (blood, &c.); passed about two pints of urine, dark, tea-coloured (bile); no albumen.

12th.—11 A.M.: The patient passed a restless night; bowels not open for two days; attempts at defecation have been accompanied with much pain (tenesmus); passed about two pints of highly bilious urine. Pulse 120, fair volume and regular; temperature normal; conjunctivæ much more jaundiced; tongue coated with white fur, and moist; vomited about two pints and a half of "coffee ground" material (altered blood).—11 P.M.: Vomited since last visit about two pints of coffee-ground material; passed about one pint of urine. Delirious—wanderings consist of work behind the bar. Pulse 120, temperature normal; very restless, tossing and throwing herself about in bed; taken no nourishment since 7 P.M.; bowels not open since the 10th inst.

13th.—8.30 A.M.: The patient passed a very restless night, tossing and throwing herself about in bed; she was unconscious in the morning. She passed about half a pint of urine; there was no further vomiting. Pulse 130, very soft but regular; aspect more yellow and worse; tongue coated and dry at end. She died at 1.30 P.M. in an exhausted "typhoid" state.

The treatment consisted, as above stated, in administering, first, a large dose (three ounces) of castor oil, which was rapidly returned by the mouth, and afterwards thirty-minim doses of oil of turpentine with mucilage for six hours. For the next three days I kept her on carbonate of magnesia and mucilage, with Rattley's solution, to relieve pain.

Necropsy, two hours after death.—Body in fair state of nourishment, generally bile-stained, especially so in conjunctivæ; no œdema; no external marks of violence; rigor mortis well-developed in lower extremities, and in jaw, but not in arms. Abdomen commencing to turn green. Height 5 ft. 2 in. to 3 in. Sordes on lips and on teeth. Patches of post-mortem lividity on upper arms and shoulders and neck. Body clean; nails blue. Head: Skull somewhat thick; scalp, and, indeed, all the tissues, yellow (jaundice); membranes of brain apparently normal, over the sinuses glistening. Brain weighed 2 lb. 12 oz.; surfaces healthy; about two fluid ounces of yellowish-red fluid in the ventricles, otherwise structure normal in every respect. Chest: Lungs not adherent; about two fluid ounces of yellowish-red fluid in pericardium. Heart 8½ oz. in weight. Right side contained fresh dark clot entangled in columnæ carneæ; surface greenish-yellow; valves normal. Left side empty, same characters as right side; outer surface usual amount of fat of yellowish-green colour. Left lung 12½ oz.; right lung 13 oz. (weighed without pulmonary vessels and bronchus), both healthy in every respect. Hypostatic congestion at both posterior margins and base. Liver: 3 lb. 4 oz. in weight; margins yellow; surface normal (not nodular). On section, structure presented well-marked fatty degeneration; around branches of portal vein, olive green tint; patches at anterior margin more fatty than elsewhere. Kidneys: Right, 7 oz. in weight; capsule slightly adherent in places; cortex yellow fatty; pelvis deeply congested, and containing pus; left weighed 8 oz. exactly; same characters as right. Spleen weighed 4 oz.; normal. Stomach contained one fluid ounce of altered blood (coffee ground); pyloric end yellow; cardiac end greenish-blue. Rugæ studded with small ecchymoses, also the upper margin. One patch as large as a shilling on an-

terior surface denuded of epithelium. No perforation. Intestines contained about half a pint of solid material, consisting of blood at upper part and slate-coloured fæcal matter at lower. Valvulæ conniventes much congested, and apparently the seat of hæmorrhage. The nearer the lower bowels the more solid were the contents. Uterus and vagina: These were preserved. On anterior lip is an irregular enlargement, nodular and slightly harder than surrounding tissue; mucous membrane disorganised; whole part deeply congested. Bladder contained about one pint of urine. Uterus: On examining the cavity, mucous membrane was found in a highly congested and hypertrophied state, and at the fundus was discovered a cyst as large as a small pea embedded in the mucous membrane. This was removed, but on preparing it for examination I unfortunately washed it off the slide and lost it. On the right ovary was a corpus luteum with a recent plug of fibrine in it. But as all the tissues were so bile-stained it is difficult to state positively its true characteristics.

The microscopic examination of the tissues was kindly undertaken by Dr. J. F. Goodhart, whose notes I append:—"Liver: Under a low power the structure of the liver is still readily recognisable, and in this the specimen differs from slides of three cases of acute yellow atrophy that I have in my possession. The hepatic cells are present in large numbers, and have their natural trabecular arrangement. The columns are abnormally separated by dilated blood or lymph spaces, and the individual cells are cloudy and ill-defined. The portal channels are everywhere characterised by a crowd of small nuclei which stain with logwood deeply. The epithelium of the smaller ducts is cloudy and blocks the tubes in many cases. Under a high power (one-fifth) it is seen that the hepatic cells are exceedingly ill-defined in outline, and full of granules and even drops of oil. But in many parts even where the cells themselves are hazy the nucleus is still fairly visible. It appears to me that in opposition to what others have described the nuclei of the cells have in great measure resisted the degenerative process. The change in the cells is uniform throughout each lobule, but some lobules are rather more affected than others. The blood spaces between the cells are empty, and the liver appears to be very bloodless. The portal canals are uniformly studded with small round nuclei or cells, which are in part, and might be said in great part, due to increase of the connective tissue or to a cirrhotic process. But I am more disposed to favour the view that they are due to migration from the bloodvessels, because they are so uniform in size, and the hepatic cell and connective tissue in their neighbourhood are undergoing no changes in the way of growth whatever. I cannot detect any fatty changes in the vessels, but some of the smaller biliary ducts contain some cloudy albuminous material, and their nucleation is not distinct. No retained biliary pigment is visible. The heart is remarkable for the extreme disappearance of the striation. The muscular fasciculi show pale hyaline bands with the nuclei of the sarcolemma well defined, but no trace of striation, and no fat; but this may have disappeared in mounting, &c."

Edgware-road, Hyde Park, W.

DISLOCATION OF LEFT COSTAL CARTILAGES BACKWARDS, WITH DISLOCATION OF RIGHT CLAVICLE FORWARDS ON STERNUM.

BY STAFF-SURGEON JOHN MULVANY, R.N., F.M.S.

I HAVE not been able to find any record of a costal cartilage having been dislocated, few writers even cursorily allude to such a casualty, and those consider it an impossibility. The following case is therefore probably unique.

On Nov. 18th, 1878, the *Grivfrici*, a Danish brig, put into Port Stanley, in the Falkland Islands, for repairs, and I was asked to see a boy who had been injured. He was a tall, spare, effeminate-looking Danish lad, aged fifteen, and the following was the history of his case. He was employed at the wheel, assisting in steering, when the ship was struck by a monstrous wave (abreast of Cape Horn), which threw her on her beam ends, swept away the port bulwarks, the wheel, the wheel-house, the mate, compass, and after-part of the cabin-hatch. As the wheel-house was hurled from its fastenings it struck the boy below and behind the right shoulder, and dashed him against the edge of the cover of the deck-house. He was rendered insensible, and when he regained consciousness he found himself in his bunk. The force which tore away the striking body, and inferentially the momentum with which it was propelled against the boy, may be inferred from the following facts related to me by the captain and others. As the ship was thrown to leeward on her beam-ends, an ordinary seaman was shot by the canting right over the bulwarks into the sea, and the galley stove was wrenched from its fastenings on deck and hurled in the same direction. It, however, got jammed in the fore-mast shrouds, where it remained until the ship reached the Falkland Islands. When the seaman had been precipitated into the tumultuous sea, he naturally gave himself up for lost, and his surprise may be conceived when, instead of sinking, he found himself rising slowly above the waters. At first nothing save the angry waves was apparent around him. He could not see the ship, still he rose, dazed and mystified, until he perceived the top of a mast, and then he found himself jammed in the foremast futtock rigging. He had, as the captain described it, "fallen forty feet upwards into the foretop." From the occurrence of the accident until I saw the patient, three days elapsed, and during this time he was unable to move out of his bed. When I saw him he was complaining very much of pain in the left side of his chest, and stated he coughed up about two teaspoonfuls of blood on two occasions—viz., soon after recovering consciousness and again next day. For the purpose of examination it was necessary to remove him into the saloon; he was unable to stand, but could sit up, the effort, however, started a cold perspiration on his forehead. The first glimpse at the uncovered chest gave me the impression that a great deal of damage was present. The right clavicle was seen to be dislocated forwards on the sternum, and there was a singular deformity of the left chest before and behind as low down as the seventh rib. The whole side looked fuller than natural, and stood out beyond the level of the opposite ribs. There was well-marked projection of two-thirds of the rhomboids, the scapula, and a portion of the serratus magnus. Along the spine, and half an inch outwards, the natural appearance and level of the parts were retained, and this brought the projection of the outer two-thirds of the rhomboids into bolder relief. The superior angle of the scapula was perceptibly higher on the left than the right side, and the whole bone looked lifted away from the ribs. The neck was bent forwards, and the head leaned gently towards the right shoulder. When this position was corrected, and the neck straightened, by drawing the head backwards pain was occasioned, and a linear depression was produced along the basal edge of the scapula, which disappeared as the neck and head resumed their former positions. In front there was a considerable prominence at the top of the sternum, a little internal to the right sterno-clavicular articulation, with a deep depression above and below the clavicle approximation of the shoulder to the mesial line and other evidences of the right clavicle being dislocated forwards on the sternum. This was the only abnormality apparent on the right side. No marks of contusion were anywhere visible, and pain was only complained of in the upper part of the left chest in front, and below the right shoulder behind. The respiratory movements were restricted on the left side, but the respirations were not accelerated; there was no difficulty of breathing, and no cough. A deep inspiration increased the pain below the left clavicle, but not to any great extent. Percussion was clear all over the chest, and auscultation detected no abnormal sounds; the air penetrated the ultimate air-cells; but its entry was feeble in the left lung, and the expiratory act was prolonged. On the right, the sounds were puerile. No fracture was detectable in the ribs or in the sternum. Whilst examining this bone, I noted a very decided difference between the levels of its right and left margins: the left being considerably in advance of the right, and tilted forward in such a way as to give a very peculiar obliquity to the bone. Measurement from its left and right borders to the spine showed, notwithstanding the apparent increase in fulness of the left side, a difference of five-eighths of an inch less on that side; and from the edges to the borders of the axillæ (the hands in apposition above the head) there was a difference of a little over a quarter of an inch less on the left side, and the diffe-

rence existed also to the axillary perpendiculars and the mammæ; but from the left nipple to the inferior angle of the scapula the distance was one-eighth of an inch greater than on the right side. On passing the finger along the left border of the sternum the cartilages of the second, third, and fourth ribs were not met with in their normal sites; and the finger had to be pressed deeply backwards before they were reached. On running the fingers from the ribs on the right side corresponding to these, over the sternum, they sank into the costal articulations, and considerable force had to be exercised before the cartilages were reached; reversing the proceeding and feeling cautiously along the second, third, and fourth ribs, a gradually increasing pressure had to be made as the sternum was reached to maintain palpation of the cartilages; arrived at its edge further progress was arrested. By these manœuvres I found that the pain which was referred confusedly to the whole upper anterior portion of the left chest was located in greatest intensity and almost exclusively in the three costo-sternal articulations before-named.

The boy being seated on a stool I placed my knee between the scapulæ and tried to remedy the displacements by drawing the shoulders backwards, but failed. The captain then came to my aid, and standing behind me, I placed his hands in such positions as would enable him to draw the sternum and left ribs in opposite directions, which he did at the same time as I drew the shoulders backwards and outwards. The end of the clavicle slipped into place and the whole anterior deformity was removed, but returned again as soon as we let go. A second attempt was attended with precisely similar results. I now changed places with the captain and showed him how to act whilst I endeavoured to draw the cartilages away from the sternum. Our combined efforts easily removed all deformity, but the rectification was not permanent, it only lasted as long as traction was kept up. As the captain let go I distinctly felt the cartilages glide between my fingers. Another effort was similarly unsuccessful, and again I felt the cartilages slip through my fingers. Almost in despair at this non-success, I again changed places with the captain, hoping that, as he was more powerful, he might be able to hold the parts *in situ* when reduced until I applied the necessary bandages. Accordingly he placed a knee between the shoulders, and drew the sternum and left ribs in opposite directions, whilst I pulled the shoulders outwards and backwards. When the chest looked normal I desired him to hold on firmly, but as I let go I had the mortification to observe all the deformity recur. The captain observed, "We pulled the parts well into place that time, but when you let go I felt the ribs slip through my fingers." I now adjusted a large pad between the shoulders, another in the right axilla, and a small one over the end of the clavicle, and then getting the captain and mate to act as we had just done, and reduce all deformity, I quickly applied a bandage, and placed the lad flat on his back in bed. In eighteen days the deformity was in great part but not wholly removed, and he began to move about, and in two months he was at work, feeling no inconvenience whatever.

Up to the seventh day from being injured no signs of contusion were observed; then a black-and-blue patch began to show itself below and behind the right shoulder, on the chest-wall and adjacent portion of the arm, which soon increased to a considerable size. This was a spot he referred pain to, and it was here he was struck by the wheel-house. He was very positive the whole chest was not squeezed, that only the left side came against the deck-house in front, and that he was only injured behind, in the parts subsequently manifested by the marks of contusion.

It would thus appear that the forces acted diagonally, the striking being from right to left, and from above downwards and behind forwards, and the resistance being in opposite directions; so that whilst the left cartilages were forced backwards the whole upper portion of the right chest-wall was impelled forwards and to the left, and thus acted on, the posterior costo-sternal ligaments gave way, and the points of the cartilages passed behind the sternum, where their presence occasioned the peculiar obliquity of its left margin, its tilting forwards being evidently due to, and symptomatic of, unimpaired elasticity, whilst the other deformities of the left chest were owing to shortening. In an older person fracture of a serious, perhaps fatal, nature might have been produced.

Dockyard, Portsmouth.

ON SOME SUGGESTIONS FOR A

MODIFICATION OF THE GERM THEORY OF DISEASE.[1]

BY K. W. MILLICAN, B.A., L.R.C.P. EDIN.

THE antagonism of opinion between authorities of repute concerning the nature of contagium became strongly evident to me in the consideration of a case which occurred in my practice to be presently related. An endeavour was, therefore, made to construct an hypothesis which, while admitting all that was positive in the various explanations of contagium at present extant, should at the same time be capable of explaining those exceptional cases which caused the adherents of each party in turn to negative the propositions of the other. It is, however, to be clearly understood that what is here advanced claims to be no more than a mere hypothesis; and should it obtain general acceptance as being probably well founded, it would still require to be verified at the hands of those skilled in the investigation of nature. The case which called forth this train of thought was briefly as follows.

A farm labourer, aged twenty, was found to be suffering from diphtheritic typhoid. On the twelfth day of the fever a crop of rose spots had appeared on the abdomen, and the chest displayed a peculiar marbled appearance, livid in colour, over the pectoral regions, and becoming distinct mulberry petechiæ over the sternum. The temperature was 105° F.; pulse 120; respiration 34. On the fifteenth day of fever the temperature had fallen to 100° F., and the patient was easier. The mother called my attention to some pimples on the buttocks and wrists. The rose spots were soon replaced by others, and the purple spots faded away. On the twenty-first day of the fever the pimples on the buttocks and wrists had become vesiculated. The mother's dictum was that "they looked for all the world as if he had been vaccinated." The father thought them "like the cow-pox." On the twenty-fifth day, when I saw him, the temperature was 105·4° F., and the vesicles had suppurated. The pustules scabbed over, the rashes disappeared, and ultimately the patient recovered.

The peculiar features of this case are: (1) the combination of symptoms simulating typhoid, diphtheria, typhus, and small-pox, co-existent in one person; (2) the impossibility of tracing direct contagion of *any* infectious disease; and (3) the fact that no disease was transmitted.

Dr. Wilson, the medical officer of health, who saw the case in the very early stage, wrote in reply to my queries, that the only source of contagion was of a purely local character; the lad had had no communication for many months with anyone except people with whom he was intimate; and to my certain knowledge there were no other cases of infectious disease previously in the neighbourhood. The points specially commented on by Dr. Wilson were: (1) a habit of drinking out of wayside pools; (2) the deposit of excremental matter from closet-pails at the bottom of the garden; and (3) the presence of an old cesspool into which the drains conveying slops emptied, and which received the drainage from the privies, previous to their conversion into pail closets. Milk and water agency were quite cleared of blame.

The problem thus presented for solution is the apparent *de novo* origin of a disease resembling in some of its characters four commonly supposed distinct specific diseases. In considering the explanations of the acute specific contagia, we are met by two principal rival theories—the "germ theory" and the physiologico-chemical view.

Arguments on behalf of the latter are mainly negative: (1) the *de novo* origin of certain cases of disease; (2) absence of conclusive demonstration of the organic nature of the poison; although organisms have been found in disease, they have also been observed in the healthy subject; and (3) no necessity for such an hypothesis; uræmia and other toxic conditions amply prove that serious morbific results quite comparable to those of acute specific diseases may be produced by chemical decomposition in the system.

The majority of the medical profession, however, appear

[1] Abstract of a paper read before the Medical Society of London on Feb. 27th.

to be almost unanimous in adopting the "germ theory" in some form or other. The principal arguments are:—(1) Antecedent probability, by comparison with yeast fermentation, the result of the Torula cerevisiæ, concerning which a clear parallel is drawn by Dr. John Shea in the *Medical Times and Gazette* of Dec. 20th, 1879. The chief heads are as follows. There is in each—(*a*) an organic fluid; (*b*) possibility of fermentation by germs; (*c*) rise of temperature; (*d*) correspondence between kind of germ and kind of fermentation; (*e*) disappearance of germ on completion of fermentation, with appearance of spores, which after an interval re-establish fermentation until susceptibility is exhausted; (*f*) possibility of checking this sequence by cold and a bitter. (2) The evidence connecting the occurrence of organic forms in the blood with special diseases, which is rapidly receiving fresh confirmation—e.g., spirilli in relapsing fever. (3) The evidence from parentage: like produces like. (4) The extensive reproduction of the poison. (5) The presence of fixed incubation periods.

It now remains to be considered whether the contagion is one and protean in its manifestations, or multiple and specific. Arguments in favour of the latter—(*a*) Constant reproduction of like from like; (*b*) antecedent improbability of such diverse manifestations being the result of a common cause; (*c*) the connexion of distinct forms with distinct diseases.

In favour of the "unity" theory may be stated three classes of cases—(*a*) Where disease of one type appears to reproduce disease of another type; (*b*) where two or more distinct diseases appear to result from a common cause; (*c*) cases of indeterminate type.

Class 1.—Dr. G. de Gorrequer Griffith quotes (*Obstetrical Journal*, June, 1879), a case related by Dr. Holland, where from patients in a school suffering merely from nasal discharge and labial excoriation an epidemic, "presenting every conceivable variety of scarlatina and diphtheria, with and without rash, resulted." *Cf.* also the relation of scarlatina to ordinary septic fever as evidenced by "surgical scarlatina." Also the fact that cases of puerperal fever have been traced to the contagion of measles, diphtheria, typhus, typhoid, and scarlatina. (Dr. Braxton Hicks, *Trans. of Obstet. Society*, vol. xii.)

In *Class 2* many cases are quoted: (1) A case of scarlatina, and scarlatina from diphtheria, arising from same source (Dr. Griffith in article quoted *supra*). (2) Case of three dustmen from the same yard, admitted close together into St. Mary's Hospital; two had rosy typhoid spots, one mulberry petechiæ. (Dr. K. Chambers: Lectures, chiefly Clinical, p. 96.) (3) Case of a boy sent to St. Mary's Hospital with rose spots of typhoid; mulberry typhus spots had recently been in the boy's family, and one brother had died of it (Dr. K. Chambers: Lectures, chiefly Clinical, p. 98). (4) Case where typhoid and pneumonia appear to have arisen from the same cause (Dr. K. Chambers: Lectures, chiefly Clinical, p. 104).

Class 3.—Instances so numerous in most practices, that it is scarcely requisite to adduce any. I have had cases of rötheln, some leaning towards scarlatina, others towards measles. A recent case[2] also which I relate appeared to be one of aborted *de novo* typhus. Moreover, the case at the commencement of the paper is a notable example. Also one of the dustmen mentioned by Dr. Chambers (*supra*) developed a mixture of rosy and mulberry spots.

How, then, are we to reconcile the specificity of these diseases with the admission of their possible *de novo* origin, and their aberrations of type, consistently with the germ theory? To answer this question I propose to apply the doctrines of evolution and the origin of species. We must not look too much to the organism, but must consider also the influence of the pabulum. Suppose an "indifferent" organism which has never had its habitat in the human body. If that organism get introduced therein, it will endeavour to adjust "itself to its environment." If it succeed it will develop, and reproduce its like. To do this it must have some pabulum, which it will probably extract from the blood. The chemical alteration thus effected in the blood is quite competent to account for a train of symptoms. But the original organism, which by a process of "adjustment to its environment" appropriates as pabulum certain elements of the blood, because (*a*) of their superabundance, (*b*) their similarity to its natural food, or (*c*) their devitalised and consequently *unstable* condition, will implant on its offspring an hereditary tendency to select the same pabulum on introduction into another host. We shall thus have a *reproduction* of the same train of symptoms in another case. The farther the germ is from the parent stock the more firmly will this hereditary tendency to selection be implanted, and the more "specific" will become the disease.

A probable argument in favour of this theory is the acquisition under proper cultivation conditions of the harmless bacillus fœni, of the virulent properties of the bacillus anthracis, and also the reverse experiment—viz., Pasteur's modification of the virulence of the bacillus anthracis, whereby it becomes possible to inoculate therewith with safety. I cannot help thinking that the application of this principle will explain all the abnormal and conflicting conditions which have hitherto proved so puzzling—the *de novo* origin of "specific" diseases, their usual "specificity," their occasional aberrations, and the various gradations and indeterminate types which are so common and so puzzling.

In conclusion, I venture to suggest that a true solution of the difficulty will result, not from trying to classify all abnormal cases under certain uniform types, but rather from a careful observation of their aberrations and distinctive characters, and an accurate record of the same.

[2] This is the case referred to by the President as possibly one of ulcerative endocarditis.

DISORDERS OF THE SYMPATHETIC SYSTEM.

BY METCALFE JOHNSON, M.R.C.S., L.S.A.

PERHAPS there is no subject which presents more obstacles to its correct comprehension, but which at the same time offers greater scientific attractions, than the subject of the present article.

In a paper published in THE LANCET of Sept. 26th, 1868, the difference of nervous manifestation between the cerebro-spinal system of the vertebrate kingdom and the great sympathetic or ganglionic system of the invertebrate was entered into with a view to show their somewhat distinct yet conjoined influence on the phases of neuric display in the normal condition of health, as also under the influence of disease. It was attempted to show how the organs of animal life which are concerned in the carrying on of the united processes of nutrition and reproduction exercised an influence through the medium of the sympathetic nerve on the circulation, by which the neuric manifestations are produced, and how any aberration from perfect health in any of these organs would lead to the development of some of those diseased forms of what may be termed neuro-phasis, at present known under the common but inappropriate name of hysteria.

A few cases sketchily related will illustrate the meaning of the following remarks. The cases, however, are of a kind such as occur to every practitioner in almost everyday experience, but more especially to those engaged in any form of the specialty of psychic medicine.

A case of a very striking character was presented to my notice a few years since, in which a man of very powerful physique became, between the age of forty and fifty, the victim of depressed spirits, melancholia, and finally of insanity. He retained much of his vigour of physique and perfection of contour, but his mind became depressed until it was necessary to restrain him in an asylum. There in a few weeks he saw and became convinced, from the evidence around him, of the cause of his malady. He retained sufficient vigour of mind to determine to cure himself, and in a few months was restored to society a reclaimed character. I need scarcely say that the cause of his insanity was the practice of masturbation, from which vice there seems much evidence that a very large proportion of ganglionic insanity and other neuric disorders arise. No doubt, in the case of idiots and youth of small mental capacity, the tendency to this depraved habit may arise from an undue development of the genital over the volitional and intelligent propensity, or perhaps it may be said of the ganglionic over the cerebro-spinal impetus. But, independent of this, the facts of the case warrant the opinion that great harm is done to the growth of the mental vigour of pubescent youth by want of attention on the part of parents and schoolmasters and mistresses to this most important question.

One of the earliest cases that was brought under my notice occurred during one of my journeys to school on the top of the coach, as was the custom of travelling formerly. My attention was attracted to my companion, who was looking up with a fixed stare into the sky, and a slight struggle was evident in his limbs; in fact, he was in an epileptic fit, the cause of which I have every reason to know was that common one of undue excitement of the organs of reproduction.

A short while since a young man came to me whose appearance indicated the cause of his malady. He had a pale, acne-spotted face, light thin hair, and a physique generally deficient in development. His father, who was with him, said he had always been a very quiet lad; never took any notice of "t' lasses"; very taciturn and rather given to study; wrote a fair hand, and "was varra keen o' larnin'" (anxious to get information); was a fair church-goer, but not fond of night singing, street preaching, or that kind of excitement. He had been in a wild way for about a week; talked at random. When I came to him he was writing names of people on a scrap of paper. He then gave me the paper and pen, and told me to write, which I did, scribbling all sorts of nonsense, of which he did not appear to notice the absurdity. In fact, he was labouring under one of those forms of mental aberration in which the hallucination appears to arise from sympathetic irritation of the sensorium from functional disorder of some organ under the control of the ganglionic system of nerves. It is one of those cases which puzzled the older pathologists when, on post-mortem examination, they found the cerebro-spinal axis quite free from disease, but which seem to me to be easily explained by reference to cases such as will be hereafter detailed.

A few of my friends to whom some of my views had been mentioned began to look on the post-mortem table for evidence of lesion in the great sympathetic nerve, in which I think they were in error, as the lesion, if any, should be looked for in the reproductive or nutritive organs themselves, not in the nerve, which is only a communicator of impressions, which often, moreover, arise from an organ simply in a state of functional, not structural, derangement.

Some years ago I was called to see a lad of about sixteen years of age, who had fallen in an epileptiform seizure. I inquired into his habits, and found that he had for some time been accustomed to self-pollution. I explained to him the danger into which he was falling, and he at once acted on the advice, and became in a short time a very fine manly fellow, and never had another fit.

It is not only in this way, however, that "ganglionism" shows itself as a form of disease; but in irritation set up by either functional disorder or organic disease, any organ when under the control of the sympathetic nerves—for instance, the uterus, ovaries of the female, and in some cases the organs of nutrition, such as the bowels in both sexes—will produce some of these abnormal actions on the nerves both of sensation and motion.

The following case presented some interest, as showing the connexion of procidentia uteri with abnormal sensation.

A. B——, aged between thirty-five and forty, engaged in early life as a domestic servant, was in the habit of lifting such heavy weights, that in the course of time the uterus, which was generally healthy (no ulcer cervicis), with the exception of a slight enlargement of the posterior wall, was forced down into the lower part of the pelvic cavity, where it pressed slightly on the sacral nerves; but it was through the medium of the sympathetic that her greatest suffering was produced. She became frequently subject to attacks of morbid sensations, which she described as if her body were being torn to shreds. These sensations were frequently contemporaneous with the catamenial periods, which were healthy in all their characters.

But a more painful case of affection of the motor nerves was in that of a lady who during the continuance of her catamenia had periodical attacks of such a violent character that she has been projected by opisthotonic spasm from the sofa to a distance of three or four feet. I have seen the face and whole body distorted to such an extent that it seemed as if hardly a muscle was in a state of normal action. This was due simply to functional disorder of the uterus and ovaries, and after the cessation of the catamenia the spasms gradually disappeared.

The case of a woman suffering from cancerous disease of the cervix uteri in whom delusions and lowness of spirits were such as to render it necessary to send her into seclusion, is one among others which tend to show the association of "ganglionic" insanity with uterine disease. Cases of this kind have been reported in former papers in THE LANCET and elsewhere. This case is supported by the oft-quoted one of the man whose insanity was cured by removal of the penis.

A young woman, aged twenty-two, whose catamenia were regular but painful, experienced pain over the right ovary for a week before the commencement of the discharge. On the first day of the catamenial flow she had severe fits of an epileptiform character. The convulsion was similar to epilepsy, but there was no foaming at the mouth, and her consciousness returned immediately after the convulsion had ceased. These symptoms continued for some months, until after a somewhat alarming attack of hæmoptysis she was found to be pregnant. After the confinement all signs of the epilepsy ceased at once.

A very striking case occurred in a male subject, whose life terminated in ramollissement. He was amaurotic during the last ten or twelve years of his life, and, so far as information on that subject can be relied on, the procreative instinct had been misused to a very great extent. Other cases of amaurosis from the same cause have occurred in my experience.

The following report is one such as is usually called simple hysteria, for which, considering the term as applicable to the male as to the female subject, and remembering that the cause of the symptoms as often as otherwise arises from other organs in the female than the uterus, I propose to substitute the term "ganglionism."

The patient is a female, aged twenty-eight. She complains of feeling very ill and low-spirited, but does not know any cause; is worse in the morning, and when alone feels as if she were going to die; has "globus." This it may be remarked *en passant* is, singularly, in the region of the cervical ganglia. The pain is unlike that referable to any lesion of a part in which a spinal nerve is implicated, but is rather a sense of constriction than of pain. Hence, though pathology is unable to solve the point, I think we may reasonably suggest that this symptom is closely related to that section of the ganglionic tract, as also is the next symptom of which the patient complains—namely, a sense of weight and dragging, which is called "pain in the side," a feature so common as not only to escape the notice of the physician, but almost to pass unheeded, as part of the ordinary "ills of life that flesh is heir to," by the patient. Yet it may, with the same show of reason, be referred to the semilunar ganglion, being quite distinct from any such pains as are produced by distension of the stomach, or any of the more acute pains, either muscular or proceeding from an inflammatory cause, such as pleurisy or the like. In this case, as in most similar ones, an unheeded vaginal leucorrhœa had existed for some time. The uterus, though healthy, was slightly procident and gave rise to pain over the sacral vertebræ. This pain is distinct from the general lumbar pains so frequently complained of. In all diagnosis the character as well as the seat of the pain is deserving especial notice. The catamenia were described as healthy, but pains (referred to the ovaries, over the seat of which there was also tenderness on pressure) generally preceded the appearance of the catamenial flow for two or three days. In this patient the heart, lungs, abdominal viscera, liver, and kidneys were in good health, but, as might be supposed, the stomach was discharging freely copious eructations of (tasteless) wind, and on examination the region of the pylorus was tender on pressure. This is one of the most common ailments for which the physician's aid is requested; the symptoms, though mostly expressed by the ganglionic centres, are due to organs especially under their control, and give rise to that depressed condition of mind called hysteria, through the action of that chain of nerves finally upon the sensorium. But in order to relieve the mental depression our remedial efforts must be directed to other organs than the brain.

In the following case, in which the mental symptoms are more pronounced, the abnormal expression of the sensorium was also plainly due to a disordered condition of the organs of reproduction.

X. B——, wife, multipara, aged forty-nine; catamenia, hitherto only slight, have latterly given place to a somewhat severe flooding. When first seen she complained of severe pain in the head, and did not remember the beginning of her illness, when her daughter and her neighbours put her to bed. She thus describes her feelings: thought she could jump through the window; has seen faces of dead friends asleep and awake. Fancied she was walking on the canal bank,

going to drown herself, while she was all the time confined to her bed. "Felt as if she had a wheel going in her right shoulder." In this case the mental disturbance (which lasted some three or four weeks) was evidently due to the disorder in the reproductive organs; and the abnormal sensation was produced through the medium of the ganglionic nerve, from the sacral to the middle cervical plexus, involving in its course the semilunar ganglion, and by necessity the special organs of nutrition.

(To be concluded.)

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

MIDDLESEX HOSPITAL.

CASE OF ADENOMA OF UTERUS ACCOMPANIED BY SEVERE METRORRHAGIA; REMOVAL OF TUMOUR; CONVALESCENCE.

(Under the care of Dr. HALL DAVIS.)

FOR the notes of the following case we are indebted to Mr. McCausland, resident obstetric assistant.

M. W——, aged twenty-five, married two years and a half, was admitted into Prudhoe ward Nov. 3rd, 1881. The family history showed no morbid tendency. Ten months after marriage her first and only child was born at term, and living; she suckled it for twelve months; the catamenia then reappeared once, and normally. In June, 1881, slight hæmorrhage occurred from the uterus; three weeks later, while in bed, an abortion at four months and a half set in with considerable hæmorrhage, for which the medical attendant removed the fœtus, which came away entire in its membranes. From that time hæmorrhage had continued more or less, at times in an alarming degree. In October the patient was treated in a special hospital, and something, she believed, was removed, but the hæmorrhage recurring after she left the hospital, she applied for admission into Middlesex Hospital.

On admission she was a spare woman of somewhat fair complexion, very weak, with pallid face, and excessively anæmic lips and gums; the tongue was pale and flabby. Temperature 97·4°; pulse 140, small and weak. There were constant nausea, severe headache; slight blood-stained discharge issued from the uterus. The vagina was pallid and relaxed; the uterus was movable and in good position; the external os uteri was patulous, the anterior lip being red and excoriated. On applying the taxis to the wall of the uterus in front of the cervix, a dense tissue could be felt through. The patient was so weak that it was not judged prudent then to submit her to operative treatment, especially as there was no actual hæmorrhage. Citrate of iron was given thrice daily after, and pepsin before food; beef jelly, and subsequently chicken also, comprised her diet. As the irritability of her stomach subsided her strength improved.

On November 19th and 21st and December 2nd she had recurrences of hæmorrhage, which were severally arrested at once by vaginal plugging, also by subcutaneous injections of ergotine and by gallic acid.

On December 5th tents were employed to dilate the os, so the point of the finger could be passed within to examine the internal condition of the uterus, when a growth with an irregular surface could be felt attached to the anterior wall of the uterus. It was thought better, however, as there was no hæmorrhage present, and the patient was very weak, to wait for farther rallying of strength before resorting to operative interference. On the 8th the dilatation, having been maintained, was completed under anæsthesia—a mixture of chloroform and ether being administered—and the growth was removed by torsion, as it was not of a shape to admit of the application of the écraseur wire. A small part of the growth was so identified with the uterine wall, that it had to be left. The uterus was injected with cold water, and swabbed out with perchloride of iron. Only slight hæmorrhage attended the operation, and none followed it. On the 9th the temperature was 105·4°; headache and rigors occurred. This condition was treated by quinine and a light nourishing diet; cooling applications were made to the head, and the uterus was washed out with Condy's fluid from time to time, some offensive membranous flakes being discharged. The temperature now gradually fell, so that on the 20th it was 98·2°.

At the end of the month the patient complained of pain in the lower lumbar and sacral regions, although otherwise she was much improved, and had had no recurrence of hæmorrhage. A re-examination was made, and discovered retroflexion of the uterus. This was treated by a Hodge's lever pessary, its upper end being adjusted behind the neck of the uterus.

On Jan. 25th, the pessary having fulfilled its intention of restoring the uterus to its normal position, it was removed, without any relapse occurring. On the 31st a normal menstrual period supervened, and continued satisfactorily to Feb. 4th, when it ceased.

On Feb. 7th, the patient having been kept in the hospital that she might be watched through the period just passed, she was discharged, with a rose-tinted complexion, for her home at Willesden.

The removed growth, having been reserved for microscopic inspection, was, after it had been hardened in chromic acid, examined in thin sections by Dr. Sidney Coupland, who pronounced the structure to be a specimen of adenoma. The disease of the uterus was most probably the cause of the abortion in June, and of the subsequent losses of blood.

EAST LONDON HOSPITAL FOR CHILDREN.

ACUTE TUBERCULAR PERITONITIS AND MENINGITIS IN A CHILD; NECROPSY; REMARKS.

(Under the care of Dr. H. DONKIN.)

THE following case of acute tuberculosis of the three great cavities in a child is interesting from the point of view of its clinical course, and may be instructive from the difficulty of early diagnosis which it presented.

Frederick K——, aged five years, was admitted on Nov. 2nd and died on Nov. 12th, 1881. The family and personal history of the case revealed nothing but the existence of an "abscess on the neck" six months previously. The illness for which the child was admitted was said by the mother to have begun suddenly two months before, the child seeming previously perfectly well. The first symptom noticed was distension of the belly with much pain. For a few days there was diarrhœa, with light coloured stools, and some headache. The pain was said to be relieved by hot grog; the mother thought it was "wind." The feet and legs were said to have swollen a little after the child had sat up long, and the eyelids were noticed to be puffy in the mornings. The child appeared feverish and listless. For two or three days before admission there was slight cough.

On admission the temperature was found to be 101·8°. On the day after admission Mr. J. S. Battams, the resident medical officer, made the following note: Child very pale; some puffiness about eyelids and bridge of nose. No obviously enlarged cervical glands. Tongue: white fur in middle, red at tip and edges. Heart and lungs apparently normal. Abdomen much distended; veins not prominent. Percussion gives a resonant sound everywhere; no lumps to be felt; no gurgling. Liver and spleen apparently not enlarged. No œdema of extremities, but slight at scrotum. No spots. Pulse 88; regular; temperature 98°; respiration quite normal. Urine since admission only 3 oz., of healthy appearance; no albumen. On the afternoon of this day, November 3rd, Dr. Donkin saw the child. The abdominal distension was then not very noticeable. Some slight clicking sounds were heard on inspiration at the lower part of right lateral region of chest.

The diagnosis seemed to be that of a probable recovery from some acute attack, either of pleuro-pneumonia or enteric fever, the latter appearing perhaps less likely considering the shortness and anomaly of the course of the illness. The boy continued pale and somewhat listless; but took his

food fairly well. On the 4th and 5th he passed brown semi-solid stools. On the 7th no abnormal physical signs were found in the chest, and there was no distension of the abdomen. The child appeared somewhat drowsy; but otherwise with the exception of the pallor, which has persisted, not ill. He was allowed to get up next day. On the 8th he was up for two hours only; but he was so increasingly drowsy that he was put to bed again. He vomited. The pulse was 80, and irregularly intermittent. At night his breathing was noisy, and he seemed but half conscious; during this night he screamed twice, and no urine was passed. On the 6th, 7th, and 8th no motions were passed. On the 9th the symptoms remained the same. He vomited once and passed a motion. On the 10th he seemed to have some difficulty in swallowing, and his breathing was rather snoring in character. He rested on his back, and appeared semi-comatose at times. He could put out his tongue when asked; it pointed somewhat to the right, the mouth being drawn to the left. The pupils were equal and active. A clear discharge was noticed from the left nostril. The abdomen, which was not distended or apparently tender, gave a sensation between gurgling and crackling on pressure, especially on the right side. The pulse was 80, irregular, and intermittent; respiration 32, regular, never suspicious. No rash. It had seemed strongly probable for the last few days that meningitis had set in, though the diagnosis of uræmia suggested itself as possible to one of my colleagues. On the 11th the child seemed much the same; at night he had a wet pack, and sweated freely, and when asked if he were better nodded intelligently. At 2 A.M. on the 12th he had a general convulsion, with loud stertorous breathing and foaming at the mouth, and died at 3.50 A.M.

The temperature from the 8th to the night of the 11th ranged between 99° and 101·6°. Six hours before death it was 101°; two hours before death 102·8°, five minutes before death 108°, and ten minutes after death 106·3°. No motion was passed after the 9th.

The post-mortem examination was made by Mr. Battams twelve hours after death. He noted as follows:—Abdomen: Omentum and intestine adherent to the walls. Intestines matted together with recent lymph; much arborescent deep injection, chiefly in patches, especially in small intestine. Intestines studded all over with yellow nodules, from the size of a pin's head to that of a pea. The abdominal peritoneum was also thickly studded, especially on the under surface of the diaphragm, which was adherent to the liver. Mesenteric glands: None larger than an almond, some cheesy. No fluid in the abdominal cavity; no ulcerations in intestines or enlargement of agminated or solitary glands. The surface of the liver was studded with small granulations; spleen also, both superficially and internally. In the chest there were grey granulations, though not numerous, scattered over the pulmonary pleura. The lungs were crepitant throughout, excepting a small cheesy patch at the right apex. No fluid in pleural cavity. The bronchial glands were enlarged and cheesy on section; one, surrounding the right bronchus, was the size of a pullet's egg. The brain was firm; the membrane over the left hemisphere was cloudy; over the right middle lobe there was blood-stained fluid beneath the arachnoid; same appearance, but less so, on the left. The sides of the longitudinal fissure were coherent with lymph. A few granulations in membranes were found over the cortex. The pia mater at the base was studded extensively with minute granulations; no excess of fluid in ventricles.

Remarks by Dr. DONKIN.—The chief points of interest in this case seem to be: (1) The recession of the abdominal symptoms—i.e., distension and pain after admission into hospital, and the absence of physical signs, rendering obscure the tubercular peritonitis so obvious after death. But a due estimate of the history of the case should have given more weight to the symptom of tympanites, so common at the outset of tubercular peritonitis, especially in view of the small favour which at any time was given to the theory of enteric fever. (2) The short time before death that the diagnosis of tubercular meningitis became reasonably probable, thus lending no help to the earlier diagnosis of tubercular disease of the abdomen. (3) The markedly acute character of the attack. A case of this kind gives a valuable clinical lesson, illustrating a malady of an acute order, the chances of whose occurrence we hardly as yet sufficiently recognise when seeking the causes of symptoms which do not at once explain themselves. The subject of acute tuberculosis in children, other than ordinary tubercular meningitis, was, from its clinical importance, proposed, in a preliminary prospectus of the Section of Diseases of Children, for discussion at the recent International Medical Congress; but, unfortunately, it did not elicit the promise of any contributions. The present case may be looked upon probably as one of primary acute tubercular peritonitis, tending possibly to recovery, but ending in death by the supervention of a meningitis which ran an unusually rapid course. The occurrence of death so soon after the symptoms pointing to tubercular meningitis set in may account for the absence of many of the clinical indications of that disease. (4) The absence of any marked collateral evidence of scrofulosis.

MATER MISERICORDIÆ HOSPITAL, DUBLIN.

DISSECTING ANEURISM OF THE ABDOMINAL AORTA IN A FEMALE, WITH THE FORMATION OF A DIFFUSE FALSE ANEURISM CAUSING OBSTRUCTION OF THE BOWELS.

(Under the care of Dr. J. M. REDMOND.)

M. B——, aged fifty-four, a widow, was admitted on the 9th of February, 1882, said to be suffering from obstruction of the bowels. She stated that during the last two years she had had repeated attacks of constipation, accompanied by more or less abdominal pain, which were relieved in the usual manner by taking pills &c. According to her statement, hot drinks had an almost immediate effect in allaying the pain. On the present occasion, domestic remedies having failed to relieve her, she sought admission into the hospital. About a year before she had a similar attack, but not of so severe a character, for which she was treated by an eminent suburban practitioner, who looked on it as being of renal origin.

On Saturday, Feb. 4th, previous to admission to the hospital, she complained of constipation, accompanied by pain, which was situated in the left iliac fossa. Twenty-four hours afterwards she was seized with vomiting, which persisted till she was admitted into the hospital. The patient could give no history of strain, or of having over-exerted herself in any way.

On admission her condition was as follows:—Pulse 130; temperature 99°; respiration 25; heart feeble, and intermitting every fifth beat; appearance healthy, and not at all anæmic. She complained of severe left lumbar pain, also pain in left iliac fossa, which was paroxysmal at times. Abdomen greatly distended with flatus, tympanitic over the greater portion, but dulness was detected in the left iliac fossa, which could be traced upwards to the margin of the thorax; circulation in the femoral arteries normal, but they were observed to be considerably enlarged, which suggested that the patient might be the subject of the aneurismal diathesis, but neither pulsation nor bruit could be detected on examining the abdomen and lumbar regions. There was no œdema of the legs. Her condition improved considerably under treatment, pain diminishing, and at one time ceasing for twelve hours, pulse and heart growing stronger. On the morning of the 11th she became faint, but recovered after a short time; towards evening she again grew weak, and sank gradually, till she died on the morning of Feb. 12th, at 2 A.M.

Necropsy, twenty hours after death.—Body well nourished; abdomen greatly distended; heart healthy; aorta dilated, and on the inner surface close to its origin a few small atheromatous patches were observed. Abdomen: No trace of peritonitis; intestines greatly distended with flatus; descending colon reduced considerably in diameter and pushed forward by a large diffuse false aneurism twelve inches in vertical length; circumference fifteen inches, anterior wall being formed by peritoneum, descending colon, and sigmoid flexure, posterior wall by iliac fascia, &c., and left kidney, which was situated at the upper and back part of the sac. The sac was filled with coagulated blood, and had a thick deposit of fibrin on the inner surface, being particularly well marked at the apex, where it averaged in depth about two inches. There was an extravasation of blood under the left broad ligament of the uterus. The posterior wall of the sac exhibited a large irregular opening exactly corresponding with a similar opening on the anterior and left lateral aspect of the abdominal aorta, about one inch above the bifurcation, and caused by the rupture of a

dissecting aneurism. The handle of the scalpel could be passed upwards between the coats of the aorta as far as the origin of the superior mesenteric artery and downwards between the coats till the origin of the common iliacs was reached. Common iliac arteries presented two aneurisms about the size of walnuts, the left one being much the larger. Femoral arteries were also in an aneurismal condition. In fact, there appeared to be a tendency to develop aneurisms at constant intervals.

Medical Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

The Influence of Albuminuria on the Temperature of Phthisis.

THE ordinary meeting of this Society was held on the 14th inst., Mr. John Marshall, F.R.S., in the chair, who, on taking it for the first time as President, addressed a few words of thanks to the Fellows for his election, and referred to the position and work of the Society. The President announced that the Council had drawn up a memorial to be presented to Her Majesty the Queen on behalf of the Society, expressive of their sorrow and indignation at the recent attempt on Her Majesty's life, and their thankfulness at her providential escape. The announcement was received with marked approbation by the Fellows who were present. He also announced that as the credit of the Society had been compromised by the previous vote of money to the Harvey Tercentenary Memorial Fund, which had subsequently been declared *ultra vires*, the Council had resolved to open a subscription list among the Fellows, for the purpose of raising the required sum, which would be given to the fund as a contribution from the Fellows themselves, and not as from the Society as a corporate body.

A paper was then read on the Influence of Albuminuria on the Temperature of Phthisis Pulmonalis, by Dr. C. THEODORE WILLIAMS, of which the following is an abstract:—The author drew attention to the frequency of albuminuria as a complication of phthisis, to the insidious character of its approach, and to the grave prognosis it imparts to otherwise hopeful cases. Its influence on the clinical history of phthisis, and especially on the temperature course, was then considered, and sixteen illustrative cases were given. The patients were twelve males and four females, of ages varying from sixteen to forty-six. In all excavation of the lungs had taken place, and extension of the disease, either in the form of excavation or of tuberculisation, was actively proceeding. In some there was in addition ulceration of the larynx or intestines; eleven out of the sixteen had diarrhœa more or less profuse. Albuminuria was present in all, and was generally accompanied by anasarca or by ascites, or by both. The temperature observations were made in the mouth five times a day, for periods varying from five days to six weeks. The effect of the renal disease was to mask the usual phthisical symptoms, and especially to lower the temperature. This was demonstrated by (1) temperature charts in a case of acute phthisis before and after the supervention of albuminuria; and (2) by comparing the sixteen cases with the temperatures of forty-three similar third-stage active cases, free from the complication, showing that while the curve under ordinary circumstances would be highly pyrexial, in the albuminuric patients it is sub-febrile; and the post meridian rise from 2 P.M. to 8 P.M., although present, is carried on at one degree lower in the scale. The maxima and minima show the ordinary extremes of ordinary third-stage cases. Thirteen of the patients died, and from twelve autopsies it appeared that the tubercular changes were proceeding up to death uninfluenced by the uræmia. The kidneys were found to be distinctly lardaceous in seven cases; large, white, and mottled in three; granular, or affected with interstitial nephritis in two. Lardaceous disease affected other organs besides the kidneys in five out of seven cases. These results were confirmed by post-mortem records of the Brompton Hospital, which show the existence of lardaceous disease in fifty-two per cent. of deaths from phthisis. Microscopic examination demonstrated the lardaceous change to generally begin in the vessels of the Malpighian tufts, and later on to involve the epithelium of the tubuli Contorti. This evidence is contrasted with the statistics of Bamberger, Lecorché, and Southey, which give lower percentages of lardaceous disease in phthisis. The urine of the patients was as a rule scanty, the quantity falling in one case to seven ounces, and in another to two ounces and a half. The specific gravity in the lardaceous cases was high—in one instance reaching 1047. The daily excretion of urea varied from 337 grains to 54 grains; in the last instance it was accompanied by diarrhœa, and gave rise to no symptoms of coma. The rate of urea excreted daily compared with the patient's weight, estimated by Parkes at three grains and a half per pound in a healthy man, in these cases fell to two grains and under, in one case reaching 0·9, a very small percentage. The albumen was very abundant, even sufficient, on boiling, to cause the urine to become solid. The reason of the lowering of the temperature was then discussed, and the author concluded that it was not due to decrease or disorganisation of the red corpuscles, or to diminution of the albumen in the blood; but, judging from the experiments of Hammond, Stolnikow, Bernard, and Barreswill, arises probably from the toxic effects on the nervous system, caused by the retention within the blood of the constituents of the urine, though not of the urea alone; that coma did not often occur was probably due to the excretory influence of the diarrhœa, generally present. The prognosis of phthisis and albuminuria is very unfavourable, most hospital cases only surviving a few months after the appearance of albumen in the urine; in private practice patients have been known to last for several years, but in the majority albuminuria must be reckoned as of fatal import, and the ordinary duration of chronic phthisis, as extended by modern treatment, is much curtailed by this complication.—Dr. MARCET said that albuminuria was a very common attendant on phthisis, and had been but little considered. The chief point raised was the lowering of temperature coincident with the albuminuria. The determination of urea gave the inquiry great interest, but the amount of urea varies so much with kind and quantity of food, &c.—diarrhœa diminishes it—that it was difficult to assign much pathological significance to it. The appearance of albuminuria is frequently associated with diarrhœa, and possibly the fall of temperature partly depended on the latter. Wunderlich gives no information of value as to the influence of albuminuria in lowering of temperature, but he states that chronic Bright's disease is not attended with pyrexia—acute is. By increasing the action of the skin the temperature of the body can be lowered. The act of secretion of urine probably requires very little heat, because its constituents are so readily dialysable. But in pathological conditions there is also albumen, which is non-dialysable; and in order for this to pass through it requires much power, and therefore much expenditure of heat. It is not a question of inflammatory disease, but the mere transudation of albumen. If so, the absorption of so much heat would explain the fall of the general temperature, just as diaphoresis does.—Dr. ANDREW said that of course all the different forms of albuminuria might occur in phthisis, and he asked Dr. Williams whether any special form of phthisis was associated with a special form of renal disease. In such cases the albuminuria might precede the pulmonary disease, and he knew of cases where albuminuria was the first symptom, the phthisis supervening and continuing after the albuminuria had ceased.—Dr. JAMES POLLOCK did not think albuminuria and phthisis were very commonly associated. The paper had led him to think what was the cause of the high temperature of phthisis, and what is the mode of reduction of body-temperature generally. High temperature is invariably accompanied by great waste of tissues, and he believed that in phthisis it was due to the loading of the blood with effete material. He had seldom, if ever, known cases in which with waste of body there was not high temperature also. The fall of temperature, coincidently with albuminuria, was not sufficient ground for saying that the latter produced the fall. The mode of lowering temperature is through the skin; but he could not accept Dr. Marcet's explanation. He had observed in cases of progressing phthisis, where the urine became albuminous, that the pulmonary disease is temporarily arrested, and he would explain the fall of temperature by the arrest of the wasting of the body, leaving acute tuberculisation aside.—Dr. GREEN asked whether only lardaceous disease was being considered; and if in an early stage there should not be much loss of albumen, but an increased flow of water? However,

Dr. Williams's tables showed great waste of albumen, as if the lardaceous disease were advanced. In that case why was the presence of albumen not noticeable earlier? He thought the diarrhœa would account for the diminution of temperature, and that the prognosis was sure to be grave in such advanced cases of lardaceous disease.—Dr. R. THOMPSON said that he had found that cases of phthisis where the weight of the body rises before death were cases in which albuminuria was present.—Dr. R. O'CONNOR mentioned a case of phthisis with albuminuria, with high temperature, and criticised some of the statements in the tables.—Dr. C. T. WILLIAMS, in reply, said that as nearly all the patients were on the same diet, it therefore could not have had much influence upon the amount of urea. He was rather surprised to hear so many state that diarrhœa lowers temperature. He had found that where there is but little ulceration of intestine the temperature is but slightly influenced; where it is extreme the temperature is heightened. If the fall of temperature be due to the transudation of albumen, how is it that the temperature continues to fall as more albumen passes through? He had not observed any special forms of kidney disease in association with special forms of phthisis; nearly all the cases were lardaceous. Kidney disease is also one of the causes of phthisis. In reply to Dr. Pollock, he recalled Dr. Ringer's work on the Temperature of Phthisis, and his own observations confirmed it, that if the patient can take enough food and rest, there will be no waste, in spite of pyrexia. In these renal cases the dropsy would increase the weight of the body. Again, in many cases there was acute tuberculisation going on. In these cases there was not the great loss of water mentioned by writers as characteristic of lardaceous disease in its early stage.

CLINICAL SOCIETY OF LONDON.

Chimney-sweep's Cancer of the Axilla treated by Amputation at the Shoulder-joint.—Aneurism of Axillary Artery.—Myxœdema.

THE ordinary meeting of this Society was held on Friday, March 10th, Joseph Lister, Esq., F.R.S., President, in the chair. Two cases of considerable surgical interest, in which amputation at the shoulder-joint had been performed, in the one case for a cancerous growth in the axilla, and in the other for a diffused axillary aneurism, and a case illustrating the temporary improvement occurring in some cases of myxœdema, formed the topics of discussion. Mr. Lister described an important improvement in the preparation of chromic acid catgut, which consists in soaking it in a solution of sulphurous acid; by this means it is made far more resistant to the action of living tissues, and can be kept in the dry state, and then only requires soaking with carbolic-acid lotion before use.

Mr. GEORGE LAWSON brought before the Society the case of a chimney-sweeper, upon whom he had operated for a Chimney-sweeper's Cancer in the Axilla. The man was shown at the previous meeting. The patient had had the disease twice removed, but it recurred after each operation. He was admitted into the Middlesex Hospital last November. At that time there was in the right axilla a wound about two inches long with hard ragged edges, and from this there was a sanious fetid discharge. Through this wound a probe could be passed in all directions beneath the pectoral muscle, where there was evidently a large epithelial ulcer. The patient was anxious for an operation; but as it was clear that, owing to the rigid state of the pectoral muscles over the ulcer, the mere excision of the growth would not prove satisfactory, Mr. Lawson obtained the sanction of the patient to amputate the arm at the shoulder-joint if, in the course of the operation, he thought it advisable. On Nov. 24th, the patient having been placed under ether, a knife was passed into the wound in the axilla and the pectoralis major divided. A large epitheliomatous ulcer was then exposed. This was dissected away, but as the disease had encroached on the artery close to the axilla, Mr. Lawson felt that if he stopped here the operation would be useless. He therefore tied the axillary artery just below the edge of the lesser pectoral muscle, where the artery and the tissues were healthy, and as the wound was very large he amputated the arm at the shoulder-joint, and brought the flap, which he had made of skin and muscle, on to the chest. The man made a good recovery, and there is now only a small sinus leading up and back towards the scapula. Mr. Lawson stated that the reasons which induced him to amputate the arm at the shoulder-joint were, first, to obtain sufficient skin to cover the wound caused by the excision of the epithelioma and the division of the pectoral muscle, and next to prevent the formation of a free collateral supply of blood to the region from which the epithelioma had been removed. The disease had begun as a "soot-wart," the name first given by Perceval Pott, and now commonly used by sweeps; and although it had lasted for seven years no infection of the neighbouring lymphatic glands had occurred. This slow course without lymphatic injection was characteristic of this peculiar form of epithelioma produced by the irritation of soot, wherever it occurred. It was well known that "soot-warts" and chimney-sweeps' cancer occur on other parts of the body than the scrotum. Since the operation this man had become the subject of delusions, and to escape from death by poisoning or hanging he had cut his throat; but, he was glad to say, he was doing well. At the present time there were four others among the cancer patients in the Middlesex Hospital who were suffering from melancholia or some form of dementia, and this association of the two affections was very notable and frequent.—Professor LISTER asked if the epithelioma had any peculiar features at the commencement; was it a flattened wart rather than a papillomatous growth?—Mr. LAWSON said it was just like an ordinary epitheliomatous ulcer when he first saw it, but he did not see it in the earlier stages.—Mr. CROFT said it was of great interest that this growth had not involved the glands; was it found on dissection that it had involved the sheath of the axillary vessels and nerves?—Mr. LAWSON said that the sheath of the axillary artery was involved.—Mr. LISTER said that no doubt the line of treatment pursued was correct under the special circumstances of the case.

Mr. HOWARD MARSH read an account of the following case. The man was exhibited before the meeting. He was a carman, aged thirty-two, who had not had syphilis or any serious illness. Eight weeks before admission he found a small pulsating swelling in the left armpit. This rapidly increased, and when he came to St. Bartholomew's Hospital it measured nineteen inches over its most prominent part. There was great œdema of the whole limb. No pulse could be felt at the wrist. After the patient had been at rest in bed for three days, the subclavian artery was tied under the carbolic spray with a silk ligature which had been previously soaked in carbolic oil for a long time. The ends of this ligature were cut off short. The case progressed favourably for three or four days, but then the swelling gradually increased in size, and on the seventeenth day hæmorrhage occurred from the sac. This having recurred on the eighteenth day, the swelling was laid open with the object of tying whichever proved to be the bleeding end of the artery. As, however, a gush of arterial blood immediately occurred, and as the patient was still in a very exhausted state, it was thought best to amputate at once at the shoulder-joint. The patient made a favourable recovery. The author remarked that the cause of the aneurism was probably a small rupture of the coats of the axillary artery, resulting perhaps from a strain. The case was a good illustration of the usual features of aneurism in the axilla, in respect to its rapid increase, the large size the swelling may attain, and the tendency of the sac to rupture. Ligature of the subclavian, the method of treatment most often successful, seemed to offer the best prospect of cure. It failed through the free establishment of the collateral circulation. Had the patient been in a less exhausted condition, the limb might perhaps have been saved by Syme's operation, even when the sac had given way, but, weak as he was, amputation seemed the safer expedient. The silk ligature, after it was thrown off, travelled towards the surface, and could at one time be felt close beneath the skin; a small shred of it was discharged through the wound. How it was afterwards disposed of was not known; but it was not observed to have escaped externally. The author thought the silk ligature unsafe, as it was apt to act as a foreign body, and so to provoke a dangerous process of ulceration in the neighbourhood of the artery. He should on any similar occasion employ the kangaroo-tendon ligature, which, so far as present experience has shown, is perhaps the most reliable form now in use.—Mr. GOLDING BIRD asked if Mr. Marsh had any special reason for choosing silk soaked in carbolic oil, as it was said to be more irritating than silk

soaked in carbolised wax. It was remarkable that part of the ligature was so early removed, had the loop divided?—Mr. MARSH said the house-surgeon removed a mere shred of silk, the rest remained in the wound.—Mr. C. HEATH said that from Mr. Marsh's account it was doubtful if the aneurism had not given way before treatment, and if so there could be no doubt as to the future course of such a case; ligature of the subclavian artery would not be successful. The usual treatment would then be to incise the tumour and ligature both ends of the artery, as Mr. Syme was the first to do. When there is a doubt as to the rupture of the sac he thought the same treatment was indicated. Mr. Syme had shown that in this operation the subclavian artery could be completely and easily controlled through an incision above the clavicle.—Mr. BARWELL agreed with Mr. Heath in this view of the case, especially as the signs of inflammation of the sac were not strongly marked. He should like to know what the temperature was before the first hæmorrhage. He thought the danger of hæmorrhage from ligature of the artery near the sac was greatly reduced by the use of some form of animal ligature.—Mr. MORGAN thought it would be interesting to know the condition of the aneurism and artery as found after the amputation.—Professor LISTER said the case was of great interest from several points of view. He thought with Mr. Heath that the sac had given way at the time when the man first came under Mr. Marsh's care, but the ligature of the main artery was not therefore necessarily hopeless. He had operated on two cases of diffuse popliteal aneurism, in one case the clot reaching up to the middle of the thigh, and in the other nearly up to Poupart's ligament; in each he tied the femoral artery at the apex of Scarpa's triangle with success, and this was a far simpler proceeding than groping about deep in the ham. It was interesting to have another example of an antiseptic silk ligature working its way to the surface; it was such occurrences that first suggested to him the use of catgut. But if he used silk at all he should prepare it by steeping in a watery solution of carbolic acid, as so prepared it is perfectly aseptic and holds well. But he thought an animal ligature was to be preferred. He believed he had arrived at finality in this matter when he gave his address last year. But soon afterwards he found that his thick chromic ligatures were more prone to superficial infiltration than others. He obtained some catgut, which had been prepared with water only and no sulphur, and this he found worse than his thick ligatures prepared with sulphur. He then tried steeping the catgut in sulphurous acid, and found he brought all the kinds of catgut to one common level and, by a further modification of the process, obtained a better article than even the best before. He now steeped his catgut in chromic acid (1 per cent.) for twelve hours, and then in sulphurous acid (British Pharmacopœia) for twelve hours, and after that the catgut withstands the action of living tissues for three weeks, and after prolonged steeping in carbolic lotion it is as strong as in the dry state. So prepared it need not be kept in carbolic oil, but may be sold dry and soaked in carbolic-acid lotion for a quarter of an hour before use.—Mr. HOWARD MARSH said that when he used this silk ligature (1880) it was the best at the time, but much improvement has taken place since then. Ligature of the subclavian artery had cured cases of axillary aneurism. The man was in almost a dying condition on admission, and he thought the ligature of the artery above the sac was the operation most likely to succeed; opening the sac at that time would, he thought, have proved fatal. Two years ago he amputated a very large tumour of the shoulder-joint; one of his colleagues compressed the subclavian artery above the clavicle. During the operation the artery was lifted up, and very severe hæmorrhage occurred, so that he then appreciated fully the value of Mr. Syme's method of controlling the artery through a superficial incision above the clavicle. He was sorry that he was unable to answer Mr. Morgan's question, for the specimen was too much injured to be satisfactorily examined, but where he divided the artery it was healthy.

Dr. MAHOMED showed a case of Myxœdema, occurring in a married woman, aged thirty. Her family history was good. She had been married twelve years, and had had seven children, the youngest eight months old. The symptoms of her disease commenced towards the end of her last pregnancy. She had the usual signs of the disease, and her appearance was very characteristic. When first seen there was great swelling of the lower eyelids, which hung like bags containing fluid. Her face was generally swollen, lips bluish, cheeks pink, hands were hard, swollen, brawny, and stiff, so that her movements were awkward and her sensation impaired. There was no pitting on pressure of the affected parts. The lower extremities were not affected; speech was slow and laboured. Her chief complaint was pain at the top of the head, worse towards evening and night. The urine was not albuminous. The impulse of the heart was not perceptible, pulse small, artery apparently contracted, so that at first no satisfactory tracing could be obtained. During the first fortnight no change in her symptoms was perceptible; after that she was treated by one-fiftieth of a drop of nitro-glycerine, and from this time she rapidly improved. The headache immediately disappeared. In a fortnight the extreme swelling below the eyes had very greatly diminished, her hands were supple, much softer, and her gloves were found to be too large for her; she talked quicker. The treatment had been assisted during the last week by severe purging; a trace of albumen was found in her urine on three occasions. Her pulse tracing, when her arteries had been dilated by nitro-glycerine, showed an increase of pressure and prolongation of systole. The improvement in her condition had been frequently remarked upon by her friends, and all who had seen her at the hospital. She has now been under treatment about two months, and the skin of her hands is quite loose and almost natural. Her face, though much improved, is still characteristic of the disease. A photograph taken on February 20th was exhibited. Dr. Mahomed treated her with nitro-glycerine with the intention of relaxing her arteries, thus reducing to some extent the arterial pressure of her capillary circulation. Severe purgatives, which she said afforded her great relief, were administered with the same object.—Dr. CAVAFY quite confirmed the observation that cases of myxœdema improve during treatment, but the treatment in these cases has been so varied that probably the improvement is little due to the special treatment. He had brought before the Society two cases of improvement: in each the swelling of the hands had markedly diminished, and the movements had become brisker. He had seen under the care of Dr. Selfe Bennett a gentleman who had distinctly improved during the last year. Professor Charcot has also published a case that had got much better. But in this the treatment was residence in a warm climate, milk diet, and sulphur baths. One of his own cases was treated with strychnia, the other with ergot. Dr. Selfe Bennett's patient, who had suffered from syphilis, took only iodide of potassium. He thought that the improvement in such cases was a natural fluctuation in the course of the disease. All cases of myxœdema naturally vary in their course; for instance, they are worse in cold weather, and better in hot.—Dr. F. TAYLOR said that the case he had brought under the notice of the Society at a previous meeting was treated with jaborandi. Under this the symptoms have all improved. She is now brighter, more active, and sensation is better.—Dr. HADDEN thought the great point was to make the patients use their tissues. Nitro-glycerine probably acts by giving a fillip to the tissues. He had seen Dr. Charcot's case; it was undoubted myxœdema.—Mr. WARRINGTON HAWARD had watched a man with myxœdema, who had also had syphilis. He got into a cretinoid state, and was quite unable to leave the house. He then took iodide of potassium, a little mercury, and large quantities of morphia. After a time he improved, went out and took exercise, and then his œdema and swelling of face and hands improved, subsequently his mental condition improved much more. Now his mental affection is only shown by some slowness of speech.—Professor LISTER thought it remarkable that there was such evidence of so much improvement in so grave a disease, and one that assumed a cretinoid form. He did not understand Dr. Mahomed's theory of using nitro-glycerine. He thought the œdema must depend upon the blood-pressure in the capillaries, which would be increased by relaxation of the arteries, under nitro-glycerine. And, in accord with this, Dr. Cavafy's case improved under ergot, which causes contraction of the arteries.—Dr. MAHOMED thought these cases of improvement were of great importance in showing the disease to be a chronic œdema, and not tissue degeneration, which would not show signs of even temporary improvement; but the œdema comes and goes. Charcot's treatment is just that used for chronic Bright's disease; and he concurred in Dr. Cavafy's remark that all cases are better in warm weather. His patient complained greatly of the purging from the elaterium he gave

her; but when omitted she asked to have it ordered again, as the purging greatly relieved her. He thought the nitro-glycerine did really relieve the tension in the capillaries, for it aided in the passage of blood through them.

The following cases were shown before the meeting: Case of Radical Cure of Congenital Hernia in the adult, by Mr. Golding Bird; Case of Ichthyosis, by Dr. Bernard O'Connor.

The meeting then adjourned.

MEDICAL SOCIETY OF LONDON.

Hodgkin's Disease with Suppuration of Glands.—Cortical Tumour of Brain.

AT the meeting on March 6th, Dr. W. H. Broadbent, President, in the chair, the report of the Sub-Committee appointed to examine the nature of the concretions from the appendix vermiformis in a case related by Dr. Day on Feb. 20th was read. The report stated that the concretions were fæcal, and not of the nature of gall-stones.

Dr. SANSOM showed a case of Lymphadenoma (Hodgkin's disease) in which there had been suppuration of some of the glands. It was a girl aged five years and a half, who had been under his care for six months. There were enlargements of glands in the neck, axilla, and groin. The spleen was much enlarged and felt hard, and there was marked anæmia. Much improvement attended the administration of Fowler's solution in increasing doses. After two months' treatment suppuration occurred in a group of glands seated outside the right sterno-mastoid; an abscess formed and was evacuated, healing well under antiseptics. Dr. Sansom was not aware of any recorded case of Hodgkin's disease in which a like suppuration had been noted. The anæmia remained stationary, and the spleen was increasing, but in many places the glands had diminished in size.—The PRESIDENT pointed out that in many respects the case differed from Hodgkin's disease, which he had seen improve under arsenic; but recovery was quite the exception, as was also suppuration of the glands.—Dr. S. MACKENZIE said that in some cases of Hodgkin's disease suppuration did occur, and no doubt some recovered. He related details of one well-marked case under his care, with recovery under arsenic.

Dr. HUGHLINGS JACKSON read a paper on a case of Convulsive Seizures, beginning in the Right Foot, owing to Cortical Tumour of the Left Cerebral Hemisphere. The patient died last January, having had fits, always beginning in the foot. He was first under Dr. Jackson's care in 1872. In some of the seizures the arm was affected after the leg; sometimes he lost consciousness, and then possibly the spasm was more widely spread. After some of the fits, if not after every one, the leg was partially paralysed, and after repeated fits it was almost completely paralysed. The man died hemiplegic in the right side, and with right-sided pneumonia. It was not known whether this hemiplegia followed convulsive seizure or not. A gliomatous tumour, in which were some small clots, was found, involving the posterior half of the superior frontal convolution and that of the ascending frontal convolution from which it arises. The situation of the tumour did not correspond closely with Ferrier's localisation. He referred especially to the temporary paralysis after the fits, and to the long duration of the liability to seizures of the same kind in a case when tumour was found post mortem. There was very little headache, and optic neuritis was never seen. The convulsions were only of a localising nature.—Dr. CRICHTON BROWNE was reminded by the paper how Dr. H. Jackson had been able, by his careful induction, to foreshadow the discoveries of physiology. Dr. Ferrier had spoken with caution concerning the crural movements, because his experiments had been made on monkeys.—Dr. S. MACKENZIE said the man had been frequently under his care as an out-patient, and he thought that towards the close the patient had stated that the fits, which previously had always begun in the foot, had commenced in the right hand and on the right side of the face. There were fair grounds for believing the lesion to have been gliomatous from the first. Optic neuritis, though frequently looked for, was not detected. Treatment did much to ward off the effects of a tumour, even when this is malignant. It was important to remember the liability to hæmorrhage in connexion with gliomatous tumour.—Dr. WARNER said that a short time ago a patient, whilst under the influence of nitrous oxide gas, had been attacked with convulsions beginning in the right side of the face and right hand; and he had heard of other cases where spasmodic attacks from some source of local irritation had occurred during the administration of the gas.—The PRESIDENT said that in uræmia the spasm frequently took a unilateral course. He entirely agreed with Dr. Jackson in his views on destructive and irritative lesions, and mentioned the case of an aphasic man who had unilateral convulsions, which began in the right arm without any implication of the face. He could not accept Dr. Jackson's view as to the mode of production of the hemiplegia following unilateral convulsions, but thought that it was due rather to the congestion and ecchymosis, also giving rise to the spasm. In such cases there was often loss of sensation after an attack, not explained by exhaustion of motor centres, but which might be due to congestion.—Dr. JACKSON briefly replied, and the Society adjourned.

HARVEIAN SOCIETY OF LONDON.

AT the meeting held on February 16th, Mr. William Hickman, President, in the chair,—

Dr. STEPHEN MACKENZIE read a paper on Peliosis Rheumatica. After mentioning that the disease was variously regarded by different writers, he stated that it had characters sufficiently distinctive to enable us to separate it from other forms of purpura. He then proceeded to sketch the disease as generally seen. It occurs in both sexes, but in his experience more frequently in women than than in men. Though generally stated to be most common between twenty and thirty, he had seen several cases at a younger age than the former. One of its most characteristic features is that the purpuric spots usually make their appearance in the afternoon or evening, often with great regularity, sometimes each day, sometimes at intervals of several days, and accompanied by pain and stiffness, and sometimes with swelling of the joints. The spots are bright when first seen, but become of a dull purple by the next day. The favourite seats of the eruption are the extremities, but in some cases they are much more general. They have this amount of symmetry, that if they occur on one extremity, upper or lower, they will generally be found on the other. As a rule there were not profuse sweats unless the attack occurred with rheumatic fever, and the joint affection and pyrexia, though distinct, are not severe. Sometimes there is a certain amount of erythema accompanying the hæmorrhages, but often the eruption is purely hæmorrhagic. The attacks are often very protracted, lasting even some months, and are liable to recur. Sometimes the disease appeared to yield to salicylate of soda, sometimes to quinine and ergot; but more often it was uninfluenced by drug treatment, and gradually wore itself out. In some cases it occurred during an attack of rheumatic pain; and it occurred also in persons who were obviously rheumatic. After considering its alliance with some forms of erythema, Dr. Stephen Mackenzie narrated the following cases:—1. A lad, aged eighteen, who had had one attack of rheumatic fever, and subsequent attacks of subacute rheumatism. The patient was the subject of rheumatic heart disease. The present was the fourth attack. The purpuric spots occurred on the arms and legs, and were accompanied by moderate arthritis and pyrexia. Many outbursts of the eruption were noticed whilst under observation, and they always occurred in the evening. The attack extended over about ten weeks. 2. A woman, aged twenty-seven, under treatment for exophthalmic goitre, during the course of which rheumatic fever developed, and purpuric spots occurred on the trunk and lower extremities. Two or three crops of purpuric spots made their appearance and extended over about ten days. 3. A middle-aged woman, who had previously had acute rheumatism. In this case the purpura was accompanied by a certain degree of erythema, and the attacks occurred each afternoon. 4. A girl, aged thirteen, who had repeated attacks, always occurring in the evening, and the disease extended over ten months. She had had a similar affection ten years previously.—Mr. MALCOLM MORRIS considered the disease very rare; it was difficult to assign the extent of the purpuric and rheumatic elements in it, and it must be distinguished from erythema with effusion of blood.—Mr. CRIPPS LAWRENCE had under him a boy who suffered from purpura accompanied with

anæmia, swelling of ankle-joint, and who had a systolic apex bruit; he treated him with salicylate of soda and rest in bed, and considered it might be a case of this disease.—Dr. STEPHEN MACKENZIE, in reply, agreed that the disease was a comparatively rare one, but he hoped the characters he had laid down, illustrated by the cases, would assist in its recognition, which was of importance chiefly for prognosis.

Dr. THIN read a paper on the Treatment of Diseases of the Skin, illustrating his views by remarks on the treatment of eczema, which he showed was most successful when conducted in accordance with the ordinary principles by which acute and chronic inflammations of other parts are treated. In acute eczema the principle of rest to the inflamed part is secured by the free application of absorbent powders. By this means the inflamed rete mucosum is protected until the inflammation terminates by resolution. In subacute and chronic eczema the diseased condition is kept up by a new substance which is formed amongst the products of inflammation, and the rational plan of treatment is to destroy this unknown *tertium quid*. When the symptoms are urgent in this stage good results are obtained by using the benzoated zinc ointment of Wilson, the diachylon ointment of Hebra, and the starch poultices of Hardy. These methods of treatment protect the inflamed epidermis, and allow the *vis medicatrix naturæ* to come into play, and resolution may thus still be obtained. But frequently these means fail, and it becomes necessary to apply escharotics to the rete, the purely escharotic effect being modified by dilution. The substances generally used for this purpose are ointments containing the salts or oxides of mercury or potash soap. Their action is twofold—they destroy chemically the diseased epithelial cells amongst which the *materies morbi* presumably exists, and they stimulate by the influence they exert on the subjacent bloodvessels an effusion of the blood plasma, in which the elements of a healthy reparative action are to be found. The treatment of the more inveterate forms of chronic eczema which was most successful, was strictly in accordance with ordinary surgical principles, and consisted in eradicating the morbid product by concentrated solutions of caustic potash. Although the necessary degree of stimulation in chronic eczema might be attained by the use of any one of many irritants, in certain kinds of disease one irritant succeeded better than another. The author instanced the two methods of treating eczema of the scalp, by alcoholic solution of potash soap with douches and by diluted mercurial ointments, and gave the preference to the latter, which in his hands had usually led to a more speedy cure. In certain painful forms of moist eczema he had found the use of the starch poultices of the French school exceedingly useful. In eczema of the scrotum, when the inflammation was severe, he was in the habit of ordering arrowroot poultices, frequently renewed, with great comfort to the patient.—Dr. STEPHEN MACKENZIE considered special attention should be paid to the constitutional treatment.—Mr. MALCOLM MORRIS did not agree with Dr. Thin's method of treatment.—Dr. THIN then replied.

MIDLAND MEDICAL SOCIETY.

AN ordinary meeting of this Society was held in the Birmingham Medical Institute, on March 1st, J. Manley, Esq., President, in the chair.

Mr. T. F. CHAVASSE showed Five Calculi, extracted from an opening in the perineum of a young man, upon whom lithotomy had been performed eight years ago. A few weeks previously, while riding in a bicycle contest, the perineum was bruised, and an abscess formed in the site of the old wound. The fistula not closing, Lister's ear-probe was introduced, and the calculi, being detected, were extracted singly; the opening thereafter shortly healed. Mr. Chavasse also exhibited a specimen taken from a man, aged thirty, suffering from hip-joint disease. The head of the femur was removed, together with a large portion of the floor of the acetabulum. The case was progressing satisfactorily under Listerism.

Mr. SPOFFORTH (Kidderminster) introduced a man, aged thirty-seven, who had several large patches of true keloid developed on the chest. These commenced to form some ten years ago, and the pain experienced was of a screwing nature; the family history was good, and the general health unimpaired.

Mr. WALFORD (Dudley) exhibited the bladder of a man, aged forty-one, in which a rupture existed, the size of a shilling, on the outside of the right vesicula seminalis. The patient had sustained a fall, and when admitted into the Guest Hospital, Dudley, was suffering from extreme collapse, other symptoms being ill defined. A large catheter introduced into the bladder drew off some urine and clotted blood; with a little manipulation the instrument could be passed through the rent in the viscus. Death took place fifty-eight hours after the accident; and the post-mortem revealed a quart of urine and blood-clot on the right side of the pelvic cavity. Mr. Walford remarked that in the present instance it would have been useless to fasten a catheter in the bladder; and the condition of the patient was such as to prevent laparotomy or perineal section being performed.

Mr. LAWSON TAIT showed a myxomatous polypus, which he had removed from the urinary bladder of a female.

Dr. A. H. CARTER read a paper based upon the following interesting case of so-called Ulcerative Endocarditis. A lad, aged sixteen, was admitted into the Queen's Hospital, Birmingham, on January 30th, suffering from acute rheumatism. Had previously been healthy. There were no complications, cardiac or otherwise. On the third day after admission pleurisy supervened on the right side, and two days later on the left side also, and the patient gradually lapsed into a well-marked typhoid state. On February 15th, for the first time, a soft systolic murmur was heard over the præcordia, which could not be precisely localised. Five days later he became comatosed and died. The post-mortem examination showed double pleurisy, small metastatic abscesses (embolic?) in both lungs, and several infarcts in both kidneys; an enlarged softened spleen and perforated ulceration of the tricuspid valve also existed. The other cardiac orifices and valves were healthy.

Mr. BENNETT MAY read a paper on a case of injury to the Kidney with Hæmaturia and supposed obstruction to the ureter by blood-clot. The symptoms indicating the latter were the sudden disappearance of blood from the urine, and the simultaneous occurrence of very severe pain in the loin. Mr. May believing that urine was accumulating either in the pelvis of the kidney and ureter or in the perinephritic tissue, introduced a fine aspirating needle in the outer side of the erector spinæ, close under the last rib, aiming for the pelvis of the kidney. After passing in some distance, fluid was tapped, and seven ounces of bloody urine withdrawn. Within a few hours blood reappeared in the urine, and the patient, a young man, got rapidly well. Mr. May discussed the question of the probable locality of the fluid drawn off, concluding with the deduction that it was encapsuled in the tissues outside the kidney, into which it had escaped through a rent in the pelvis.

Reviews and Notices of Books.

Practical Exercises in Physiology. By J. BURDON SANDERSON, M.D. pp. 75. London: Lewis, Gower-street. 1882.—These exercises represent the course of work pursued by the physiological class in the school of University College. Dr. Sanderson states that they were originally arranged by Mr. Page, but in the present edition he has been assisted by Mr. North and by Dr. Waller, who have given him the benefit of their experience. The exercises are divided into four sets. Those relating to the physiology of muscle and nerve; demonstrations of arterial pressure and the use of recording apparatus; elementary exercises in chemical physiology; and, lastly, laboratory exercises in chemical physiology, these being fitted for a class rather than for each student. The experiments seem, on the whole, to be judiciously chosen, but we may suggest that under the head of Sense of Taste the student might have been directed to test primary gustatory sensations by means of acids and bitters. Again, although the glycerin-extracts of the pancreas and stomach are referred to no directions are given as to their mode of preparation. Some reference might have been made also to the pancreatic digestion of milk, which is an important point in a practical sense. The experiments on urine are good. Every student,

before presenting himself at the College of Surgeons or Physicians, should have performed all the experiments here given.

On Hæmorrhoidal Disorder. By JOHN GAY, F.R.C.S., Senior Surgeon to the Great Northern Hospital; Member of the Council of the Royal College of Surgeons. London: J. & A. Churchill. 1882.—This is a reprint of the papers recently published in our columns, which are fresh in the memory of our readers. Mr. Gay has applied himself to the study of this disease with great vigour and earnestness, and has presented his readers with some important facts. As the result of his dissections and injections, and the study of museum specimens, he concludes that all "piles" are pathological changes in the hæmorrhoidal veins, which he divides into three groups: "anal or plexiform varicosity, hæmorrhoidal varicosity, and hæmorrhoidal varix." He regards "piles" as essentially a local disease, nearly invariably caused by difficult defecation. Mr. Gay believes that he has proved by his injections that the common statements about communications existing between the portal and systemic venules are erroneous, and that it is in the liver only such anastomoses occur.

Descriptive Catalogue of the Specimens illustrating Surgical Pathology in the Museum of University College, London. By MARCUS BECK, M.S., F.R.C.S., Assistant Surgeon to University College Hospital; and S. G. SHATTOCK, M.R.C.S., Curator of the Museum. Part I. 1881. Copies may be had at the office of the College.—This catalogue has been prepared in the very best style. This part deals with the specimens illustrating the diseases and injuries of bones, joints, muscles, tendons, alimentary canal, arteries, veins, lymphatics, and nerves. The description of each series is prefaced by a concise account of the pathological changes in question. Thus the processes occurring in the union of fractures are described as a whole before the individual specimens illustrating them. Then each specimen is clearly and carefully described. We need only further say that the work is done in a manner worthy of the high reputation of the authors.

Elements of Pharmacy, Materia Medica, and Therapeutics. By WILLIAM WHITLA, M.D., Physician to the Ulster Hospital for Children; Assistant-Physician to the Belfast Charitable Hospital. London: Renshaw. 1882.—It is obviously by no means an easy matter to give an account of the present state of pharmacy, materia medica, and therapeutics within the compass of a little over 500 pages. The work before us is divided into five parts—pharmacy, materia medica, therapeutics, the administration of medicines, and pharmacopœial reactions and tests. In the first part some useful information is given as to the most approved methods of weighing, measuring, dropping, mixing, &c., and the student is instructed how to dispense various pills, powders, blisters, and plasters. The chapter headed "General Hints" is well and carefully done, and contains much that is of interest not only to the chemist but to the prescriber. In the second part, on Materia Medica, an alphabetical list is given of the different pharmacopœial preparations. This is followed by a short account, printed in red ink, of some of the better known non-officinal drugs, including apomorphia, baptisia, gelseminum, nitro-glycerine, and picrotoxine. This section might with advantage be considerably extended, the properties of some of the most useful remedies being at present dismissed in some half dozen lines. The third part, on Therapeutics, is also arranged alphabetically, and the selection of matter has, as a rule, been judicious. In many cases prescriptions are given illustrating the best mode of administering the drug. The hints on prescribing are useful, whilst the lithographic prescriptions with the accompanying explanation will be a boon to students preparing for examination. On the whole the work is well done, and contains as much information as could be condensed into a book of its size.

A Pocket Guide to British Ferns. By MARIAN S. RIDLEY. London: David Bogue.—We need not apologise for devoting a little of our space to the notice of this work. The love of ferns is not confined to any class, but is shared by all, and there are many members of our own profession who take a great interest in these very beautiful productions of Nature, which fortunately can be cultivated and studied nearly as well in the crowded and busy haunts of men as amongst the wildest and most secluded regions of Great Britain. It is comparatively an easy task, with the assistance of glass and a little ingenuity, to cultivate and produce excellent specimens of ferns which will refresh the eye and gladden the heart of the busy practitioner who has little leisure to enjoy them in their natural habitats. What is more graceful than the beautiful Trichomanes radicans or Killarney fern, and this may be often seen in all its splendour when carefully tended and placed under glass in a corner of a study where the conditions of temperature, light, and shade are maintained, and a little attention bestowed on the cultivation of many of the ferns of Great Britain will furnish an ample reward of grace, beauty, and pleasure of the highest kind. Miss Ridley's little book will be of great service to those who wish to make themselves acquainted with the subject, for although those who are anxious to go deeply into fernology must study the exhaustive works of Hooker and Lowe, and the charming treatises of Heath and Shirley Hibberd, yet a considerable amount of information will be found in this pocket guide which, as the authoress states, "is not put forward as a would-be rival to the many excellent books already published, but rather to lead on the uninitiated to a desire for further information."

On the Origin of Civilisation and Primitive Condition of Man. By Sir JOHN LUBBOCK, Bart., M.P., F.R.S. Fourth Edition. London: Longmans and Co. 1882.—This well-known work on the "Mental and Social Condition of Savages" has now reached a fourth edition, of which it is needless to say more than that its information has been brought up to the present date.

HOSPITAL FOR PAYING PATIENTS.

To the Editor of THE LANCET.

SIR,—Will you kindly read the enclosed rules which have been prepared for a hospital for paying patients, about to be established at Hampstead? At the same time I should like to obtain your valuable opinion upon a matter of professional etiquette.

I have been requested to allow my name to be placed with two other members of the sub-committee appointed to prepare circular and rules &c., at the foot of the circular appeal. I shall be very glad of your kind advice as to how it might be regarded professionally.—Yours truly,

Belsize-avenue, Belsize-park, N.W., March 10th, 1882. W. HEATH STRANGE.

*** There is this difficulty about the connexion of medical men with projects for providing hospital accommodation and nursing for the general population, that it *seems* like a method of touting for patients. We do not for a moment say it is so, but it looks so. It is not, of course, intended that there should be any restrictions as to the use of the home-hospital by private practitioners; but the profession will never feel quite free in the recommendation of cases to these homes, or in the employment of nurses sent out by local societies, while there is a special staff of medical men connected with them. The best plan would be to provide the homes with proper fittings and servants, and let the medical men of the district send their patients there and attend them personally, selecting their own resident medical officer by vote of the practitioners in the district. We are of opinion that physicians and surgeons should not give their names to the institution.—ED. L.

THE LANCET.

LONDON: SATURDAY, MARCH 18, 1882.

IT is with a feeling akin to shame that we have to record the fact that a member of the medical profession has been convicted of as foul a murder as ever was perpetrated, and has been sentenced to suffer the extreme penalty of the law. There is not one redeeming feature in the horrible crime of which LAMSON has been convicted. Motive and method were both such as humanity sickens at, and nothing short of the life of the murderer could adequately vindicate the moral code by which our civilisation is maintained.

The facts of the case are given in another column; for although the daily journals have furnished the public with every detail, we have thought it advisable to sift from the great mass of facts which were submitted to the jury those in particular which have a scientific bearing and are of peculiar interest to the medical jurist.

Regarded from a purely scientific point of view, the late trial may be looked upon with some satisfaction. Aconitine, as such, had not previously been used in this country for the purposes of the murderer, and foreign literature supplies, we believe, only one case in which this, the most active probably of all the poisonous alkaloids, has been employed for criminal purposes. It is satisfactory, therefore, to feel that the crime was brought home to the prisoner with unerring certainty. The chain of evidence with which the prosecution encircled the criminal had not one faulty link. Facts, direct and circumstantial, all pointed in one direction, so that although the prisoner was represented by a well-known advocate, no serious defence was attempted. Quibbles of course were raised, and an attempt was made to work upon the minds of the jury by an appeal to their feelings, which was merely calculated to increase the disagreeable nature of their duty, but there was no escape from the relentless logic of facts, and their verdict of guilty was the only one possible.

Dr. STEVENSON and Dr. DUPRÉ must be congratulated upon the success with which the presence of aconitine was demonstrated, and the former, we think, deserves especial commendation for the clear and temperate manner in which he displayed the scientific facts of the case before the jury. Dr. STEVENSON'S evidence in chief was completely unshaken in cross-examination. He evidently had approached his task in a thoroughly logical and scientific spirit, and he acquitted himself in the witness-box as a man of science should.

LAMSON had evidently considered his *modus operandi* carefully, and he doubtless thought that the effects of the aconitine, delayed by being enclosed in a capsule, and given on a full stomach, might be mistaken for an attack of acute dyspepsia, caused by the rich Dundee cake and sweetmeats, of which he had tempted his victim to partake somewhat freely. Even a man who had had some medical education might be excused for thinking that the fraction of a grain of an alkaloid, for which there is no chemical test, might escape detection when mixed with the mass of various matters with which the stomach was filled. He had not counted upon the unerring certainty of the physiological test. The injection of the alkaloidal extract beneath the skin of mice proved its highly poisonous nature, and it is certain that without these experiments on living animals, LAMSON could not have been convicted of his crime, and if Justice had failed in this case to attain her ends, the trial would have acted as a sort of incentive to villains of LAMSON'S class. We trust that the unprejudiced portion of the public will take notice of the useful purpose served on this occasion by these experiments, and that they will not allow even the dictum of a Lord Chief Justice to blind their eyes to common sense, or to take away any of the weapons which the law must use for the protection of the public.

Of a more novel nature was the physiological test as applied to the experts themselves. It was, however, taken with the certainty that the alkaloid was highly poisonous, perfectly satisfactory. The sensation produced by aconite upon the tongue, lips, and gullet is perfectly characteristic, and can hardly be mistaken. All parts of the plant from which the alkaloid is obtained, when chewed, are capable of producing it. The bright-green, much-divided leaves of the well-known monkshood or blue rocket, the Aconitum napellus of the botanists, are just now showing above the ground in many an old-fashioned garden, and we advise anyone who may think that the evidence of the sense of taste is insufficient for the conviction of a criminal to try upon himself the effect of chewing a portion of aconite leaf no bigger than a threepenny-piece. When this sensation was experienced again and again, and confirmed by three persons, and compared with the effect of a substance known to be aconitine, we see no reason why such evidence should not be accepted quite unreservedly—at least as unreservedly as the colour-tests which are used for the detection of certain other alkaloids are habitually received.

The theory put forward for the defence, that the alkaloids discovered were *cadaveric alkaloids* formed in the body by the process of decomposition, deserves no serious refutation. In the first place, the body was not decomposed; and, in the second, the strongest evidence of the presence of aconitine was found in the vomit, which had been preserved in spirit, and not in the body itself. We know very little of these cadaveric alkaloids; the theory of their production and their properties is still *sub judice*. But what we do know is sufficient for us to feel certain that in the case with which we have been dealing they did not in any degree interfere with the results obtained.

ANOTHER and yet another Death from Chloroform. This is the report which now nearly every week reaches us, suggesting one of the most solemn questions that can occupy the minds of the members of our fraternity. The responsibilities of the profession on this count are without limit. It applied and brought in the agent which causes the deaths; on its recommendation the general public accepted the agent, and by and through its voice declared the anæsthetic beneficent and its introducers the greatest benefactors to the human race. Is this all a delusion, and under the fascination of beneficent discovery has there crept into the

world another form of death? This is the inquiry which now stares us in the face, and which must be met. The public mind demands, and rightly demands, to be completely satisfied respecting the death of every person who dies during the administration of an anæsthetic, and bids its officers, the coroners, to hold inquisition without fear or favour. If the professors of medicine were to attempt to hoodwink the people; if they were to try to assign accidental causes, or pre-existing causes, or possible coincident causes of death, apart from the administration, and so stifle investigation, the results would be far more deplorable than any that would follow the most open and rigid investigation. No assumption of authority or superior knowledge can for a moment stand in the way. If it were possible even in a few cases to evade inquiry, the contagion of suppression would merely spread for a short time, to bring detection at last, with general reprobation, distrust, and contumely.

In the emergency so plainly before us, we call therefore upon our brethren one and all to do nothing evasive. If in any instance it may seem to them that a death occurring during the administration of an anæsthetic was due, according to their best judgment, to hæmorrhage or any other cause than the anæsthetic, even then we advise them not to advance such an opinion, however sound, as a reason for avoiding judicial scrutiny.

While the members of our body thus protect themselves from the suspicion of concealing what ought to be known, they are bound equally to protect everybody by the endeavour to ascertain how the fatalities which are now occurring may be prevented, and to answer a question which is often put forward in simple form by outside observers—namely, Why the fatalities occur at all? The difficulties that lie in the way of a correct answer to this last, and vital, question, are complex in the extreme, and have hitherto been met honestly and naturally enough, we doubt not, by apology rather than by explanation. This is not an uncommon practice when we speak of anything with which we are personally connected. A man will say of the greatest scoundrel in his acquaintance, that bad as he may be in common view, he has some good points when you know him intimately. The statement does not excuse the bad points at all, but very often it excuses the man, and enables him to go on in his career as a person to be tolerated. So it has become the custom to apologise for chloroform. Sometimes it is said to be so beneficial in the general results which it yields, that passing accidents by it go for nothing. Sometimes it is said that those it kills, like the gladiators before CÆSAR, were, in another sense, prepared to die—that is to say, their lives were suspended on so slight a thread that the merest shock, the shock of an operation, the start of fear, the tremor of passion, the effort of haste, the loss of a little blood, the throb of a concussion, might, and probably would, lead to the same fatal consequences as the inhalation of the anæsthetic. The mode by which the chloroform was administered is sometimes declared to be at fault: the administrator was not experienced; or that the patient was not properly prepared for the administration; or the apparatus used did not give over the proper amount of vapour, so that too large a percentage of vapour was admitted into the lungs; or that the patient himself, by his own obstruction and wilfulness, interfered with the administrator; therefore an accident, which need not have occurred, did occur. Sometimes it is said that the operation was the cause of the death; that the anæsthesia was not sufficiently complete when the operation commenced; that the operation was attended with unusual loss of blood, or with injury to vital organs; or that the anæsthesia was carried into the fourth and always most dangerous degree in order that absolute relaxation of muscular fibre might be secured for the operator.

These are the common apologies which we hear in connexion with fatal accidents; and when we are repeating the public question, why such accidents occur at all, the apologies come before us with singular force; for if they are real they countenance continuance of the practice and hold out the hope that the dangers they refer to are removable if greater care be taken and greater skill supplied.

We wish sincerely we could take such a cheerful view of the situation. We should be glad to be able to accept the first apology, that the sum total of good attributable to chloroform has so completely outweighed the evil as to reduce it below regard. We cannot accept the proposition. From the very first days, when it was itself brought in, chloroform brought in death. Within ten weeks after its discovery as an anæsthetic, and long before it had come into general use, it caused the death of a girl fifteen years of age in this country. Within another month it caused the death of a woman thirty-five years of age, in Cincinnati; a month later it caused the death of a man in Boston, U.S. Before other two months had passed it caused the death of a woman at Boulogne; and from then until now, a period of thirty-four years, probably not a month has elapsed without one or more deaths from its employment. We calculated, several years ago, that the deaths were in the proportion of one in 2500 administrations; but as then the record of such deaths was much more imperfect than it is now, those figures require doubtless to be revised, greatly to the disadvantage of chloroform. But if they really stood forth still as true, they scatter the apology we are treating of to the winds, for one death in 2500 applications of one medicinal agent is in fact a huge mortality. Applied to any other human act, it were an intolerable evil.

The apology that those who take chloroform to die from it are those only whose lives are set upon a cast, is, we regret to say, also largely fallacious. It is quite true that there are in this world hundreds of persons—nay, thousands—who, going about in apparent integrity of health, are, from some concealed failure, fatal in its nature, ready at any moment to die under some slight shock, mental or physical. It is equally true that many who die under chloroform are of this type. We may, therefore, admit the apology to some extent. But it is limited. The first person stricken by chloroform, HANNAH GREENER, was only fifteen years of age, had no other disease than an ingrowing toenail, and afforded no morbid evidences beyond those which chloroform itself would produce. The latest person stricken by chloroform presents the same history of freedom from disease of vital organs, and while our pen is on the paper another illustration of a similar kind comes to hand. Mr. WALTER BROWN, the house-surgeon to the General Infirmary at Gloucester, sends the note of a case of one J. C——, aged twenty-three, who was admitted into

the Infirmary for excision of the eyeball on the 12th ult. The chloroform was administered by placing a towel over the face, on the Edinburgh method. Unconsciousness was produced in about eight minutes, and the operation was commenced. Shortly afterwards the patient began to struggle, the towel was replaced, and almost immediately the pulse was found to fail. In spite of every remedial effort, death followed, and, with the exception of some copper-coloured spots on the legs, the post-mortem revealed no abnormal condition.

With these facts before us from the beginning to the end of the chapter in the history of chloroform as an anæsthetic, its most daring advocate will hardly venture to find in the second apology a sufficient warranty for continued advocacy. Nor shall we, we fear, when we resume the consideration of this serious subject, find the other excuses much more worthy of commendation.

WE have received from the secretaries of the Birmingham Philosophical Society an extract from the minutes of a meeting on February 9th, which contains a brief historical sketch of Dr. NORRIS'S remarkable papers on the blood, which are contained in the Transactions of the Society in the last four years. Attention was called to the subject by Dr. HESLOP, the President, on account of the discovery by BIZZOZERO of a new blood-corpuscle, of which we gave an account in our number for January 22nd. In our article we pointed out the resemblance of these corpuscles to those which have been repeatedly described by NORRIS. There appeared to be a *primâ facie* difference between the two in size, and in the fact that the special characteristic insisted on by NORRIS is that his corpuscles have a refracting power so nearly that of the plasma of the blood, that they are invisible until brought into view by artificial means, whereas those of BIZZOZERO were actually seen by him in the circulating blood. The closeness of the resemblance between the two is, however, clearly shown by the facts mentioned by Dr. NORRIS in the letter from him which we published on January 28th, and by the facts mentioned in the Birmingham Society's minutes. It is urged by Dr. NORRIS that the "new corpuscle" is only the "invisible corpuscle" in the further stage of development which he has traced, in which it undergoes such changes as to become visible without artificial aid. Dr. NORRIS further pointed out that the statements of BIZZOZERO as to the probable share taken by these elements in the formation of fibrin, and the method by which they may be rendered more distinct by colouring agents, are practically identical with his own.

To this Professor BIZZOZERO replies in the current number of the *Centralblatt für die Medicinischen Wissenschaften*. He first alludes to the letter in which Dr. NEALE refers to an early observation by himself of similar elements in the blood of goitrous patients. BIZZOZERO denies any intention of claiming to be the first to observe other corpuscles in the blood besides the red and the white, since such bodies have been noticed by many other observers, but what he believes that no one before himself has done is to see in the circulating blood of living mammalia, besides the red and white cells, a third form of typical elements such as the "blutplattchen," to have studied their peculiarities, and to have established their relation to the process of coagulation. BIZZOZERO then asks the question: Are his "blutplattchen" identical with the corpuscles of NORRIS? The latter are described as similar in size to the red discs, and to lose their invisibility when they gradually become charged with hæmoglobin in the process of transformation into red discs. On the other hand, the corpuscles of BIZZOZERO are usually one-half or one-third the size of the red corpuscles, and never become coloured with hæmoglobin. They are visible, because they are slightly granular, and possess a slightly different refracting power from the blood-plasma. To the suggestion of NORRIS that the "blutplattchen" are a product of the alteration of his corpuscles, BIZZOZERO responds that this cannot be, since the "blutplattchen" are visible in typical form in the living and circulating blood under its most normal conditions. He states that he has repeated NORRIS'S experiments, and has seen the corpuscles he describes most distinctly, but believes that they are simply red corpuscles, which have become partially or wholly decolorised by the method of manipulation employed. This allegation we may fairly leave in the hands of Professor NORRIS; but we may remark that few who witnessed his brilliant demonstrations, given a few years ago at the College of Physicians and elsewhere, will be disposed readily to accept this explanation of the origin of these bodies, whatever their nature may be. Nor does the objection that the "blutplattchen" cannot be derived from the invisible corpuscles, because they are seen in the circulating and normal blood, appear altogether satisfactory. To the close resemblance between the opinions expressed by NORRIS and himself regarding the relation of their respective corpuscles to the process of coagulation, and regarding the means by which these elements may best be rendered visible, BIZZOZERO does not allude.

IT is always unfortunate when a Commission composed, in great part at least, of members of a particular calling stand charged with the perpetual duty of enforcing obedience to the law on the part of their fellows, or whilom fellows. The administrators of the law should be themselves armed with power to compel the obedience of those who work under, or who are nominally governed by, their authority. The effect of leaving a Board of Commissioners to prosecute is to place them in a most unpleasant position, and, as a matter of necessity no doubt, to make many of their acts appear singularly ungracious. We can readily believe that the Commissioners in Lunacy will feel the prick of these remarks, and that we shall have their general sympathy should they deign to notice the observations called forth by some of their recent proceedings. It would be satisfactory if we could also count on their serious consideration of the criticism we have yet to offer. If we allude to the prosecution of a medical man residing at Pill, near Bristol, for having received two lunatics, or what the Commissioners are pleased to deem "lunatics," into his house, it is not with a view of discussing the details of this particular case, or of raising the question whether the action taken against this individual was or was not indispensable in the *public* interest. This case may, however, serve as an instance of the sort of prosecution—or shall we speak plainly and say persecution?—which the Commissioners are apparently fond of instituting, and which cer-

tainly strikes no inconsiderable section of the medical profession as vexatious, if not at the same time cruel. In fact, it is just the sort of prosecution or persecution we should expect to be carried on by a body of men dressed in a little brief authority and not to the manner born. The class of case to which we allude may be shortly stated thus: A medical man who receives, or would like to receive, one or two patients into his house, with a view to their treatment for some nervous malady or weakness, is moved by a sincere desire to obey the law, and takes what seems to him, and would certainly seem to us, the natural course—namely, to go at once to the Commissioners and ask their counsel. We have frequently advised medical men to pursue this line of policy. What is the result? Simply this—they put their heads into the lion's mouth. The Commissioners in Lunacy do not appear capable of understanding that there are such mental states as those which produce mind-weakness or eccentricity, without absolute insanity. The moment a medical man communicates his intention of taking a "nervous" patient, there is a commotion at Whitehall, and at once measures are taken to pounce on this medical man, and make an example of him. The Commissioners do not trouble themselves to seek out the hundreds of genuine "lunatics" who are confined in private houses under the care of laymen and lay-women, but the instant a medical man makes a voluntary communication to their office, he is marked down as offering an opportunity for showing their zeal and diligence. It certainly does appear—and we cannot disguise the fact—that these prosecutions are almost uniformly undertaken in the interests of the class of private asylum keepers rather than in that of the insane themselves, or the public. There is just now a strong and much-needed movement in favour of the treatment of mental disease, especially in its very early stages, in private families, and by general practitioners. We do not hesitate to say that this mode of treatment is best and most promising in the interests of science and of *cure*. Now it does seem—although we will not go so far as to say it is the fact—that the Commissioners in Lunacy are stoutly bent on throwing obstacles in the way of this method of treatment. If that be so, we venture to think it is time the truth came to be publicly recognised. As a matter of fact, the insane in the private families of medical men are as well cared for, and fully as ably treated, as they are in asylums. We believe their chances of perfect recovery are greater under the individual system of management than when they are housed and tended in herds. Meanwhile public safety is better secured by the distribution of the milder cases of mental diseases in private houses, because these cases are well looked after by those who are personally responsible for their safe custody, while the asylum authorities are left free to bestow all their attention on the "troublesome" cases that fall under their care. How seldom does it happen that the escaped lunatic who does some deed of violence has escaped from a private family. The manslayer is generally an overlooked patient who has made his way out of an asylum, being supposed to be inoffensive, and, therefore, passing out unnoticed! The matter to which we direct attention is one of high practical moment. It is indispensable that the medical profession and the public should feel unquestioning confidence in the Commissioners in Lunacy, and this confidence is plainly on the wane. Those who watch their proceedings from an outside standpoint are unable to persuade themselves that all *must* needs be right. They would like better evidence than that offered by asylum proprietors when the patient of some private practitioner is to be removed from his care and he is *prosecuted* for having had to treat that patient in his own house. It is in the interests of the insane and of the public that mental diseases should be restored to the category of ordinary physical maladies treated by ordinary members of the profession, and it is disquieting to find the Commissioners in Lunacy ranged in the lists of the experts, and practically using the authority entrusted to them against the feeling of the profession in a matter in which it has high concern.

Annotations.

"Ne quid nimis."

THE CAUSE OF THE DUCHESS OF CONNAUGHT'S ILLNESS.

CONSIDERABLE interest, if not a little surprise, is likely to be awakened by Dr. Playfair's semi-official statement with regard to the cause of the Duchess of Connaught's recent illness, which we publish at length in another column. It is a satisfactory and graceful fact that the communication of this report was suggested by His Royal Highness the Duke of Connaught. The act affords additional proof of the solicitude felt by every member of the Royal family for the domestic happiness and social welfare of the people. The state of affairs at Bagshot, which Dr. Playfair has been not merely permitted but commissioned to disclose, may be taken as typical of that which prevails probably throughout the class of modern and what are misleadingly called sanitary houses. The present residence at Bagshot Park is not the comparatively old house inhabited by the late Sir James Clark, but a new building, declared and believed to have been constructed on improved principles, and so perfect in its detailed arrangements as to preclude the possibility of danger from the drains. Nevertheless, an examination of the works by experts, under the direction of Dr. Playfair, has led to the discovery of a series of defects and deficiencies, the combined effects of which were obviously such as to render the Royal residence a very hot-bed of disease. About a fortnight after the accouchement of Her Royal Highness the Duchess of Connaught symptoms ominous of blood-poisoning presented themselves. Happily these were promptly recognised by Dr. Playfair, who has bestowed especial attention on the post-partum treatment of the puerperal state, and the only efficient remedy was adopted—namely, instant removal. It is, however, with the *cause* of the perilous occurrence of incipient blood-poisoning Dr. Playfair's statement is chiefly concerned. It may at first sight seem incredible, but it is the fact that the elaborately constructed system of baths, drains, and waste-pipes communicated *directly* with the soil drains of the building, and, by a Machiavellian policy which would appear to be the pastime of modern builders, pipes which ought to have been stopped were left open, and the poisonous gas which rises from fæcal accumulations was actually conducted, in sundry ingenious and wonderful ways, into the very apartments it was particularly desired to preserve from possible infection. The professedly "sanitary" constructors are, if possible, the least to be trusted. It would seem to

be the common practice of these remarkable persons to ventilate the house-drains, and therefore, of course, the sewers generally, into bedrooms. We are repeatedly hearing of this piece of wantonness. Probably, in six cases out of ten the waste-pipes of baths and cisterns, which are never cleared by a current of water except at the rare moment when a bath or cistern "runs over," communicate directly with a soil-pipe. It is well that the opportunity offered by this important instance of a wide-spread peril has been so ably utilised. The public owe a debt of gratitude to H.R.H. the Duke of Connaught for allowing the condition of matters at Bagshot to be made known, and to Dr. Playfair for the admirable and suggestive way in which he has performed a delicate duty.

THE HOMERTON FEVER AND SMALL-POX HOSPITALS.

THE reports of the medical superintendents of these hospitals for 1880 have just been published. That of the medical superintendent of the Fever Hospital, Dr. Collie, is of particular interest, and contains a summary of admissions into that hospital for the ten preceding years. During 1880 1061 cases were admitted into the hospital, of whom 878 were discharged recovered, 29 were transferred to other hospitals of the board, and 124 died, the mortality being therefore at a rate of about 13 per cent. Of scarlet fever the admissions were 769, the deaths 84, a mortality of nearly 12 per cent. Of enteric fever 131 patients were admitted, and 17 died, a mortality of about 12 per cent. Of typhus there were but 5 cases, all of which recovered. During the ten years there were 9091 cases admitted into the Homerton Fever Hospital, and of these 1517 died, a mortality of 10·68 per cent. These cases were distributed as follows:—Small-pox: Twice during the ten years the hospital has been opened for small-pox, once in 1871, and again at the end of 1876 and the beginning of 1877. During these periods 2159 cases of small-pox were received, and other diseases sent to the hospital as suffering from small-pox. Of these cases 351 died, the mortality being at the rate of 16·25 per cent. Simple continued fever: Of this fever—of which the mortality is *nil*—560 cases were admitted. Typhus: The number of patients admitted from this form of fever was 711, and of these 140 died, the mortality being at the rate of 19·69 per cent. Enteric fever: Of enteric fever 1615 cases were admitted, and the deaths (288) were at the rate of 17·83 per cent. Scarlet fever: The number of patients admitted suffering from scarlet fever was 3046, and the number of deaths among them 409—that is to say, at the rate of 13·43 per cent. Other diseases: During the ten years 1000 cases were admitted suffering from diseases other than fever. Of these 329 died, a rate of mortality equal to 32·9 per cent. Illness of staff: Of the staff at Homerton 75 contracted fever during the ten years—43 typhus (including an assistant medical officer), of whom 6 died, a mortality of about 14 per cent.; 22 enteric fever, of whom 3 died, a mortality of about 13 per cent.; 8 scarlet fever (including an assistant medical officer), who recovered; and 2 measles, both of whom recovered. Dr. Gayton's report for the Homerton Small-pox Hospital shows that in 1880, 840 patients were received, 588 discharged, 114 died, 138 cases remaining in hospital on the 31st December, giving a rate of mortality of 16·2 per cent. upon the completed cases. Dr. Gayton observes that "the character and severity of the disease varied much in the different portions of the year, being moderate in the earlier months, decreasing during the summer, but attaining a considerable degree of intensity in the winter season." The observations as to the protective influence of vaccination over both the type and mortality of small-pox confirm previous observations on the subject.

NAVY ESTIMATES.

THE Estimates for the year 1882-3, which have just been published, show a sum of £64,465 to be required under the head of "Medical establishments at home and abroad," and of £69,375 under that of "Medicines and medical stores," the former being £1500 and the latter nearly £1100 less than the amounts taken last year. As we have before pointed out, however, these charges do not really represent the cost of the medical service. We have therefore taken out separately, so far as the details given in the official document admit of it, the chief facts bearing on this point. In this manner we find that provision is made for the *personnel* of the department on the following scale:—One Director-General, 2 Inspectors-General, 9 Deputy Inspectors-General, 56 Fleet Surgeons, 109 Staff Surgeons, and 172 Surgeons—making a total of 349, or 13 fewer than in last year's estimates. The reduction has been confined to the Staff Surgeons, with the exception of one Inspector-General who filled the post, now abolished, of Professor of Naval Hygiene at Netley. The amount required for the pay and allowances of the medical officers on the effective list is £136,828, being £3300 above that for last year. There are at present 33 medical officers on half-pay, but liable to be called again to serve, for whom a sum of £9317 is taken. In addition to these there are 247 on the retired list, who are not available for further service, and whose retired pay amounts to £77,787. The form in which the estimates are prepared does not enable us to show the cost of medicines and medical comforts, but we observe a sum of £2310 is taken for the pay of dispensers in the naval and marine hospitals. Among the smaller items are to be found £415 for the examination of candidates for the Naval Medical Service, and an allowance of £150 to a staff surgeon and £50 to a surgeon "in connexion with the medical course of instruction" at Haslar,—this being the course substituted for the thorough training formerly given to naval candidates at Netley! The curator of the museum at Haslar likewise figures in the return for £200. We notice also that the munificent sum of £100 is to be appropriated for "books and specimens for the library and museum at Haslar, and books for the libraries at hospitals and infirmaries at home and abroad"! We are glad to observe that a considerable sum is to be spent on Haslar Hospital; under the head of "Sanitary improvements" it is proposed to expend £2200; for a new water-tower, tank, &c., £3800; for improving the water-supply, new mains, hydrants, &c., and means for extinguishing fire, £1500, with several smaller items. In the Naval Yard at Keyham, a sum of £500 is put down for sanitary work at Moon Cove; and a similar amount is taken for sanitary improvements in the Marine Barracks at Eastney. On foreign stations, a sum of £250 is required at Esquimalt, and £500 at the Cape of Good Hope, to provide means of isolation of infectious diseases.

DIPHTHERIA IN PARIS.

IN his recent quarterly report on the prevalent diseases of Paris, M. Ernest Besnier has drawn special attention to the constant prevalence and fatality of diphtheria. During the last quarter of 1881, no less than 605 deaths were due to the disease. He remarks that the progress of public hygiene seems as powerless to arrest the epidemic invasion of diphtheria as the medical art is to save those that are attacked. The mortality from this cause has been steadily augmenting during the last twenty years, and has so rapidly increased as to have doubled, and has now assumed and retains a foremost position among prevailing maladies. During the last ten years typhoid fever has caused 13004 deaths in Paris; eruptive fevers, 14,100; while diphtheria has caused 16,629, without including the extra-urban cases. The number of cases reported in 1881 was 1255, and of them 829 were fatal,

being a mortality of 66 per cent.; and this is believed to be below the actual proportion, since all cases which leave the hospitals are reckoned among the non-fatal cases, whereas some of them are subsequentlyfa tal. M. Besnier is inclined to attribute some degree of this mortality to the experimental treatment of diphtheria by pilocarpine. This opinion was shared by M. Dujardin-Beaumetz, who, in the discussion on the report at the Société Médicale des Hôpitaux, asked whether the constant presence of a number of children suffering from diphtheria at the Hôpital Trousseau might not be a cause of the prevalence of the disease in the neighbourhood of the hospital. M. Besnier was strongly of that opinion, and stigmatised the Parisian children's hospitals as detestable and foci of epidemics, while a considerable number of cases admitted for other diseases into these hospitals contract diphtheria there.

PUBLIC AND PRIVATE HOSPITALS FOR INFECTIOUS DISEASES.

THE vast majority of cases of infectious diseases occur in families living under conditions which render complete and satisfactory isolation a practical impossibility. Hence the necessity for the more general provision of the means for securing such isolation. It is evident, however, that the general provision by sanitary authorities of isolation hospitals cannot be looked for at present. The initial expense, and the uncertain annual cost, will alone deter most authorities from establishing these hospitals. In the mean time, however, we are not at all sure that the desired end may not be more economically and far more satisfactorily effected by the establishment of voluntary hospitals for this purpose. We strongly recommend all who are interested in this important subject to obtain a copy of the last annual report of the Delancey Fever Hospital at Cheltenham. This is a private hospital for the isolation and treatment of infectious diseases, and is under the management of trustees and a committee of management. It has existed under conditions of constantly increasing efficiency and usefulness for eight years. This institution, as regards its foundation and maintenance, has been the object of probably exceptional liberality, but there is no reason to doubt that in almost any locality the establishment of a similar hospital would be liberally supported. Such an institution practically and personally appeals for the support of all classes. The Delancey Hospital might well serve as a model for institutions of a similar kind; it is, as such institutions to be successful should be, supported by public and private subscriptions, as well as by payment for all classes of patients. This hospital contains public as well as private wards, and the report before us states that the Town Council and Board of Guardians, representing the Cheltenham Urban and Rural Sanitary Authorities, have recognised the utility of the Delancey Hospital, and its importance as an agent for the check and suppression of infectious diseases, by annual subscriptions of £100 and £50 respectively. These subscriptions are of the nature of retaining fees, additional to a weekly payment of two shillings for patients in the public wards. Among the annual subscriptions we also notice one of £25 from a local proprietary school, in return for which exceptional accommodation is secured for any pupils requiring it. The value and utility of such an institution cannot be measured by the number of patients received, but the report shows that 2 cases of small-pox and 54 of scarlet fever were received during last year. Of the 54 cases of scarlet fever, 31 were admitted to the private, and 23 to the public wards. With reference to small-pox, the report states that during the eight years 1874–81, the 26 cases of that disease admitted to the hospital represent fifteen distinct outbreaks, and that in no single instance did the disease extend beyond the family first attacked. During the past five years, 156 cases of scarlet fever have been admitted to the hospital, among which only two deaths have occurred. Such a result affords the strongest evidence of the satisfactory sanitary condition of the hospital, as well as of the successful treatment of the patients.

DEATH OF SURGEON-GENERAL STANHOPE FASSON.

WE very much regret to record the death of a distinguished member of the Army Medical Department, Surgeon-General Stanhope Fasson, Principal Medical Officer at Aldershot, who expired suddenly on Saturday last from disease of the heart. Mr. Fasson had transacted his office work on the previous day in his usual health, and although he was known by his friends to have complained lately of shortness of breath and symptoms of a weak heart, his decease may be said to have been quite unlooked for. He was sitting at breakfast with his family when he exclaimed that he felt faint, but before assistance could be procured life was extinct. The terrible suddenness of his end was a severe shock to his family and his brother officers. Mr. Fasson received his medical education in Edinburgh, and entered the army in 1846. Obtaining a commission as an assistant-surgeon in the Ordnance Branch of the Royal Artillery, he became surgeon in March, 1855, surgeon-major in 1866, deputy surgeon-general in September, 1875, and was promoted surgeon-general in May last. His connexion with the Royal Artillery extended over many years, was, indeed, only severed on his attaining an administrative appointment. Among other offices held during his earlier career was that of surgeon to the Royal Military Academy at Woolwich. His foreign and active service was varied and distinguished, commencing with the Kaffir wars of 1847, '51, '52, under Sir Harry Smith, for which he was awarded the medal with clasp. He arrived in the Crimea at the commencement of that campaign, and was present at the affairs of Bulganak and Mackenzie's Farm, at the battles of Alma, Inkerman, Balaclava, and the siege and fall of Sebastopol, receiving the decorations of the Legion of Honour, the Crimean medal with four clasps, and the Turkish medal. Later on he served in India as Surgeon-Major of a Brigade of Artillery, and in 1875 was appointed Deputy Surgeon-General in Bombay, but was invalided the following year. After a short period on half-pay he proceeded to Barbadoes as Principal Medical Officer of the West Indies; on completion of his tour of duty there, he returned home, and, on promotion to surgeon-general, became Principal Medical Officer at Aldershot. Mr. Fasson's public career is thus seen to have been distinguished and important. In private life he was universally respected and beloved, we may say by all ranks of the army with whom he was brought in contact; this was due in no small measure to his gentle kindly manner, his unfailing courtesy, as well as to the firmness and wisdom he displayed on all points of duty. In him the *suaviter in modo* with the *fortiter in re* were admirably blended; in his loss the officers of the Army Medical Department mourn one who was not only an ornament to their service, but whose life was the embodiment of that almost perfect character, a pure-hearted Christian gentleman. His remains were interred in the military cemetery at the Camp on Wednesday. The funeral *cortège* was a large and very imposing one, being formed of eleven guns of the Royal Horse Artillery, three squadrons of Cavalry, two regiments of Infantry, and three hundred men of the Army Hospital Corps. The pall-bearers included H.R.H. the Duke of Connaught, General Sir Daniel Lysons, Major-General Sir F. Fitzwygram, Major-General Willis, Colonel Reilly, Colonel the Hon. E. Curzon, Colonel Sir Howard Elphinstone

Commissary-General Long, and Surgeon-Major Low. A very large number of medical officers of the Camp was present, as well as many old brother officers, some of whom came long distances to pay their last respects to a loved comrade; amongst these were Surgeon-Generals Shelton and Fogo, Deputy Surgeon-General Irvine, Brigade Surgeon Kidd, Surgeon-Major Cuffe, C.B., General Philpotts, R.A., Captain O'Mally, R.H.A., &c.

NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC.

THE Duke of Albany, in presiding at a dinner on Tuesday last in aid of the funds of this hospital, commended it to public support both on account of its national character and because "it is served by a staff of physicians and surgeons whose reputation and skill are a guarantee for the very best being done for those who come under their treatment." Such a remark has no ordinary significance when it is applied in the case of a special hospital. It is the bane of such institutions in general that they represent scarcely anything but the ill-disguised endeavour of one or two obscure and pretentious men to push themselves into notoriety. Unfortunately the public is unfit to draw distinctions in such cases, and it was therefore particularly happy that His Royal Highness should have applied the remark in the case of a hospital which, although it deals with a special department, undoubtedly commands the respect and sympathy of the profession. It would be well if the public, before lending its support to any institution, would take care to inquire into the number and professional position of the *working* members of the medical staff—i.e., those who are really in personal attendance at the hospital. It has sometimes happened that the names of a few esteemed members of the profession, who have ill-advisedly consented to be called *consulting* physicians or surgeons to an institution, have been paraded in a manner which has served to conceal the unsatisfactory character of the enterprise. In regard to the hospital in Queen-square, it is an institution of which the profession may be proud, for there is no doubt but that to past and present members of its medical staff we are indebted in a very large measure for the great advances in neurological science for which the last twenty years have been remarkable. There is no sign of any relaxation of energy on the part of the present members, whose reputation, as Canon Duckworth remarked at the dinner, is "cosmopolitan," and we look forward to the rebuilding of the hospital, which has been decided upon, to give, if it were needed, a fresh impetus to their exertions.

DEATHS FROM SYNCOPE DURING TOOTH EXTRACTION.

IN the December number of Johnston's *Dental Miscellany* is an account of the death of a patient from syncope following the attempted extraction of a molar tooth. The patient fainted after an unsuccessful trial to extract the tooth, and a physician had to be sent for before consciousness could be restored. The man then wished to have the operation completed, in spite of the contrary advice of the physician and the dentist. However, before the instrument could be introduced into his mouth he again fainted, and all efforts to restore him failed, and he died very shortly afterwards in the hospital, to which he had been removed. This case points very strongly to the conclusion that all operations (without anæsthetics) which produce fainting or even faintness should be postponed until a second visit, which may be so timed that the patient may be fortified either by breakfast or luncheon. In another column will be found a letter by Mr. Roger Williams, in which is narrated a case of the like kind, pointing a similar moral.

REPRESENTATION OF THE MEDICAL STAFF ON THE MANAGING COMMITTEES OF HOSPITALS.

WE learn from a lay contemporary that this question has assumed an acute form at the Bristol General Hospital. Up to the present time, two members of the medical staff have sat on the General Committee, but without power to vote. A special meeting of the governors was held the other day, at which it was proposed to omit the words, "without power to vote" from the law. An amendment, opposing an alteration in the law, was lost by a large majority; but it was afterwards decided to take a poll of the governors to decide the matter. The arguments urged against the resolution were that it was contrary to the desire of the chief originator of the hospital; and that while the state of the funds of the hospital rendered economy in expenditure necessary, medical men always formed a "party" in favour of increased expenditure and lavish extravagance. This is a question on which there is no doubt room for difference of opinion; but not on the grounds mentioned above. It may be urged that while matters of medical detail should be entrusted to a medical committee, the staff are not directly responsible for the purely financial and other business arrangements of a hospital, which are best conducted by a committee composed of laymen only. On the other hand, we believe that there is more to be said in favour of representatives of the staff sitting and voting on the General Committee than against it. It is impossible to sever completely the questions in which the special knowledge of the staff is required from those in which it is not, while we cannot help regarding it as something akin to an indignity to prevent the medical members of a committee taking part in the voting. It is sometimes assumed that the staff of a hospital are quite severed from the body of subscribers, and that their interests are not only diverse but often conflicting. But as a rule the medical officers to these charities are very liberal contributors to their funds, and certainly the number of subscribers is largely kept up and increased by their individual efforts. When it is remembered, again, what the staff of every hospital contribute in their time, attention, and anxious and skilful care, it is obvious that they have prominent claims, even on the score of their contributions. Looked at in the abstract, a lay committee is a convenient, but not an essential, constituent of a hospital. The three necessary elements are sick people, medical officers, and money, and the appliances it purchases. A lay committee is called to the help of the staff to lighten its task and responsibility, but can in no way supplant it. The subscribing public, too, does not give its money to certain of these institutions rather than to others because of the constitution of their lay committees, but because of the work done by the staff. We do not wish to push these arguments unduly. But we do assert fearlessly that those hospitals will be most efficiently and economically worked in which there is the utmost cordiality between the lay committee and the medical staff, and in which it is distinctly recognised that the chief aim of the former is to help the latter in their arduous duties.

THE EDINBURGH ROYAL INFIRMARY.

THE managers of the Edinburgh Royal Infirmary have appointed Dr. John Wyllie, full physician, in the place of Dr. George W. Balfour, whose period of office has expired. The vacancy in the assistant-physicianship thus created will give rise to an animated contest. The candidates will be Dr. Byrom Bramwell, Dr. James, Dr. Moinet, Dr. Gibson, Dr. Murdock Brown. The appointment will be made on the 27th inst.

DEAFNESS IN RAILWAY OFFICIALS.

PROF. S. MOOS of Heidelberg, influenced, we presume, by the important results which have resulted from the attention of experts being directed to the colour perception of railway officials and others whose actions are guided by coloured signals, has communicated to the *Zeitschrift für Ohrenheilkunde* the results of his observations and reading in regard to the causes and effects of deafness in railway officials, to which, he points out, railway accidents may not unfrequently be attributed. Dr. Jacoby found that in the course of ten years and a half no less than twenty out of a total number of eighty engine-drivers applied to him for affections of the organ of hearing; of these, five had unilateral affections of the labyrinth, and fifteen lesions of the middle ear. Dr. Hartman, again, has found that the surrounding conditions have to be taken into consideration, drivers sometimes having to work their way through violent storms of wind, over ground that is hard-frozen and through long tunnels, and that under these conditions hardness of hearing, which, however, is often only transitory, is apt to be established. Prof. Moos refers to the remarks made in THE LANCET (Dec. 24th, 1881) in regard to the Canonbury railway accident. He also refers to a singular case in which the engine and tender with a luggage van entered the station at Provins, in France, alone, the train having been unfortunately omitted to be coupled to the engine before starting, indicating, as Prof. Moos remarks, that both engine-driver and stoker must have failed to miss the rumble of the ordinary train owing to some defect of hearing. He records a case in which, owing to the bursting of a cock in a locomotive, the steam issued with prodigious force from the valve, and temporarily deafened the driver. Various subjective symptoms, moreover, remained. On examination it was found that osseous conduction on both sides was only preserved for the C' tuning-fork. Both membrana tympani exhibited cloudiness of the mucous membrane. The sudden occurrence of the deafness, the subjective sensations that were still appreciated, and the dulness of hearing for acute and grave sounds, whilst those of medium pitch were perceived, led Prof. Moos to diagnose hæmorrhage into the labyrinth, and that the central portion of the convolutions of the cochlea were undamaged. Treatment of various kinds was adopted, but no improvement occurred, and at the end of a month his hearing was pronounced to be permanently damaged. Prof. Moos points out that there are many cases in which, as in the event of sudden fogs, the sense of vision requires to be supplemented by good hearing, and actually cites the Hornsey accident which occurred at the beginning of this year as an example of the possible chances of railway accident from such event. He thinks that the hearing of drivers should be tested as carefully as their vision.

THE TACTICS OF THE ANTI-VIVISECTIONISTS; AND THEIR TEMPER.

ON Saturday last the members and friends of the Home for Lost and Starving Dogs held their annual meeting at the offices of the Society for the Prevention of Cruelty to Animals. Among those present were the Baroness Burdett-Coutts, Miss Frances Power Cobbe, Miss Lloyd, Sir Alexander Malet, and Mr. George Fleming, president of the Royal Veterinary College. On a motion of re-election and of thanks to the Committee, Miss Cobbe moved as an amendment that, as Mr. Fleming had published in the *Nineteenth Century* an article in favour of vivisection, his name should be omitted from the committee. Miss Lloyd seconded the amendment. Mr. Fleming defended the article in question, stating that he had shown that animals, no less than human beings, were benefited by improvements in pathological experiments, and he contended that these experiments were especially important in rabies. Professor Prichard supported Mr. Fleming, and even the Baroness Burdett-Coutts, who, stating that she attended the meeting because she understood the question of vivisection would be raised, pointed out that there was a great difference between pathological experiment and vivisection. The amendment was lost, and Mr. Fleming was re-elected, only ten votes in a crowded meeting being, it is stated, recorded against him. On Tuesday morning the following letter appeared in the daily newspapers:—

"Sir,—Favour us by allowing us to announce to those who are interested in the Home for Lost Dogs at Battersea, that we have retired from the Committee, and, of course, are no further responsible for the management of the institution.—We are, Sir, yours, &c.,

"ALEXANDER MALET, MARY C. LLOYD,
"London, March 13th." FRANCES POWER COBBE.

UNQUALIFIED ASSISTANTS AND MEDICAL CERTIFICATES.

THE recent prosecution and conviction of a registered medical practitioner in Yorkshire for furnishing false certificates of the causes of death of four children, whom he had not seen during their last illness, but who had been solely attended by his unqualified assistant, is important from public, professional, and registration points of view. It is needless here to urge how completely public faith in the value of a medical certificate as evidence that a deceased person has died from natural causes, and that the death may be registered and the body buried without further inquiry, would be destroyed if medical practitioners were allowed to certify without even having seen the deceased person during illness. From a professional point of view we need not attempt seriously to discuss the assertion of the defendant in the present case, through his counsel, that it is a thing of most ordinary occurrence for medical practitioners to give certificates of the cause of death in cases where there has been no personal attendance during the last illness. The legal offence in this case was indeed not for giving the certificate, but for making the false statement in the certificate as to the attendance, and the date when the deceased children were last seen We hope and believe that such a practice is very far from being one of ordinary occurrence. Then, again, as to the counsel's claim that the defendant was justified in certifying that he attended because, as he submitted, he "did attend in those cases by his authorised agent;" and as to the further assertion that the unqualified assistants, "though not technically qualified to act as doctors, were actually and practically qualified to attend to the less serious cases"; such arguments may be justified in defence of a criminal prosecution, but could not for a moment be tolerated as an exposition of the professional view of this question. The profession is, at any rate, fully as interested in the suppression of unqualified medical practice as is the public; and if unqualified assistants could be recognised as the fully authorised agents of registered practitioners, it is not difficult to foresee how impossible it would be to draw the line between authorised and unauthorised unqualified practice. With regard to the registration aspect of the case, we are glad to know that this prosecution was instituted by direction of the Registrar-General; the legal description of the offence being "wilfully and unlawfully making out and signing certain false certificates under or for the purposes of the Births and Deaths Registration Act, 1874." This prosecution will at any rate have removed all doubt as to the alleged legality of signing medical certificates in cases that have been *solely* attended by an assistant. It is impossible to doubt that this decision will put a wholesome check upon independent unqualified medical practice. At the same time it is well

not to shut our eyes to defects in the present state of registration law, the result of which is that if in furnishing these false certificates the Yorkshire practitioner had not certified that he "had attended," no offence in the eye of the law would have been committed; the deaths would have been registered without any objection on the part of the local registrar or of the Registrar-General. The certificate would not, however, have been accepted as a legal certificate within the meaning of the Births and Deaths Registration Act, and the cause of death would have been entered in the register as uncertified, without the name of the informant of the cause of death.

CAMBRIDGE LOCAL EXAMINATIONS.

THE following notice respecting the above examinations has been issued:—

"The University of Cambridge has established an additional Local Examination, to be held in September. This examination is undertaken at the request of the General Medical Council, to meet the convenience of those who desire to register as medical students in October, for whom it will serve as the Preliminary Examination which all such students are required to pass. Those who intend to enter into articles of clerkship with attorneys and solicitors can avail themselves of this means of satisfying the preliminary requirements of the Incorporated Law Society; it will be convenient also for those who intend to enter the University in October, and desire exemption from the Previous Examination ("little go"). For these three classes of candidates there is no limit of age. The examination will commence on Monday, Sept. 4th, and will be held in the same subjects as those for the examination for seniors in the December following, and the usual senior certificate can be obtained by students under the age of eighteen on Sept. 1st. The centres of examination already announced are Cambridge and London, for which centres applications for entry must be made to the Rev. G. F. Browne, St. Catharine's College, Cambridge, and R. St. J. Corbet, Esq., 10, Portman-street, London, W. The examination may be held at other centres if there appears to be sufficient demand."

The Syndicate would, we believe, be willing to endeavour to make arrangements for an examination in any place where there are twenty-five applicants. The examination for the certificates which exempt from the Previous Examination is somewhat more difficult than that examination itself; but the students who succeed in obtaining the requisite certificates, especially if they include that which exempts from the "additional subjects," will save time and also derive considerable advantage throughout their university career. It is particularly recommended to those who intend to study Natural Science and Medicine to obtain these certificates, forasmuch as they can then at once, on entering the University, join the professor's classes at the commencement of the several courses.

THE CLAIMS OF THE LONDON FEVER HOSPITAL.

THE long-threatened collapse of this admirable institution for want of funds has begun. It has been decided that two wards must now be closed. Last year this hospital took in more than 1000 cases of fever, and has at present more than 100 cases in its wards. But we are ashamed to say that the hospital's income last year fell short by £4000 of the expenditure. The noble president, the Earl of Devon, says plainly, but not too plainly, that if the hospital does not receive largely increased support it must be closed next year. This will be a great calamity to the public, for this hospital has been a port of refuge to many families invaded by scarlet fever and typhoid. By its open doors for such cases it has saved many a family from death and disaster; yet even in the case of persons able to pay, it has often been very scantily compensated. For the sake of public credit and convenience we commend this charity to all thoughtful and liberal persons.

THE MEDICAL SOCIETY OF LONDON.

THE 109th anniversary dinner of the Medical Society of London was held at the Criterion Restaurant on March 8th, Dr. Broadbent, the President, occupying the chair. Upwards of eighty Fellows of the Society and their friends were present, the chairman being supported on the right hand by Sir Erasmus Wilson, the President of the Royal College of Surgeons, and on the left by the President-elect of the Society, Mr. Francis Mason. During the evening the Fothergillian Gold Medal was presented to Mr. Dolan of Halifax for his essay on Whooping-cough, and a silver medal to Dr. Allen Sturge for the merit of a paper, read by him before the Society, on Muscular Atrophy. The second silver medal was received by the retiring secretary, Dr. Gilbart-Smith.

A LAWYER'S ESTIMATE OF LORD COLERIDGE'S OPINION OF THE VALUE OF VIVISECTION.

THE importance attached to Lord Coleridge's opinion, ostentatiously paraded, of the value and utility of experiments on animals, has received considerable abatement in the recent trial of Lamson. The counsel for the defence endeavoured to read some extracts from an article by Lord Coleridge in the *Fortnightly Review*, when the Solicitor-General observed that his Lordship's opinion might be taken on a point of law, but not in a case of experiment on animals; and further objected to Lord Coleridge's non-medical opinion being read unless his Lordship was called. Mr. Montague Williams kindly refrained from forcing his Lordship's opinion to the test.

THE MANCHESTER AND SALFORD SANITARY ASSOCIATION.

THE annual report of this Association for 1881 shows that it continues its excellent work with unabated energy. It has established a ladies' branch, works in communication with the Association for Controlling Noxious Vapours, made a beginning with day nurseries, continues its lectures, maintains a house-inspection department, continues its weekly health-returns, busies itself with the Manchester building by-laws, with artisans' dwellings, and with the milk-supply, and does what in it lies to promote the sanitary knowledge and welfare of the immense population where it has its seat. We are glad to note that the Association is enabled to report an improved financial state during the past year.

CAN A LUNATIC MAKE A WILL?

AT the first blush of the matter, the answer to this question would seem to be decidedly in the negative. Great hardship would, however, not unfrequently be inflicted on families if the rule were rigidly enforced. The sound practical procedure would be to require absolute proof of the mental capacity of the testator in respect to the disposition of his property, and the exercise of an unfettered and healthy judgment at the time of writing or dictating, and also of signing, any will he may be alleged to have made. We are glad to see by a recent case that the Master of the Rolls, who is a judge of exceptional sagacity, is applying this rule. It will prevent many miscarriages of social justice.

CHOLERA IN WEST AFRICA.

FOR some time vague rumours have been afloat of the occurrence of cholera in West Africa. Recent information brings definite news of the imposition of quarantine, both maritime and inland, at British stations on the Gold Coast on account of cholera prevailing more or less among the Mahomedan populations on the Upper Niger. The outbreak

is believed to be an offshoot of the prevalence of the disease at Mecca and in the Hedjaz in the autumn of last year. Mahomedan pilgrims make their way from the Mahomedan populations in Western Soudan, across the whole breadth of the African continent to Mecca, and it is surmised that these pilgrims, returning from the Holy Land of the Moslems at the time when cholera was prevailing there, introduced the disease to the banks of the Niger.

THE DUCHESS OF CONNAUGHT.

WE have authority for stating that the Duchess of Connaught is practically well, and that there is no foundation for the rumour that she is "unable to walk without support." The Duchess leaves for Biarritz on Tuesday next.

PROSECUTIONS UNDER THE DENTISTS ACT.

WE are informed that the Branch Council for England of the Medical Council on Feb. 9th gave permission to a dental practitioner to take legal proceedings against two persons for describing themselves as surgeons and dentists, and for practising as such without their names being duly registered in the Dentists' Register. This, we believe, is the first prosecution of the kind under the Dentists Act.

MR. KNOWSLEY THORNTON removed the right kidney from a young woman in the Samaritan Hospital on Saturday last. The case was one of pyo-nephrosis, and the kidney was incised and drained for a month through the loin before its complete removal was decided upon. The kidney was removed by abdominal section, the incision being made outside the rectus abdominis, as recommended by Langenbuch of Berlin in the discussion on nephrectomy at the Congress. Mr. Thornton found great advantages from this incision as compared with either the ordinary median incision or the lumbar section. The patient was progressing very satisfactorily four days after the operation; there having been less fever and constitutional disturbance than there was after the previous nephrotomy, and than there often is after an ordinary ovariotomy. The patient from whom Mr. Thornton removed an extra-uterine fœtation at the Samaritan Hospital a fortnight ago is up on the couch and quite convalescent.

SOME correspondence has passed between the Glasgow University Court and the Treasury relative to the maintenance of the University buildings. The Lords of the Treasury, in considering the request of the University Court to place the maintenance of the buildings of the University under the charge of the Board of Works, refuse to admit that the University is placed on a worse footing than the other Universities of Scotland in respect of its buildings It is pointed out that, while £30,000 has been granted to Edinburgh for new buildings, £120,000 has been given to Glasgow for the same purpose. The request has therefore been refused.

A MEETING of the Royal Commission on Small-pox and Fever Hospitals was held at No. 3 Committee-room, House of Commons, on Friday, the 10th inst. There were present Lord Blachford, Sir James Paget, Sir Rutherford Alcock, Mr. A. W. Peel, M.P., Dr. A. Carpenter, Dr. J. Burdon-Sanderson, Dr. W. H. Broadbent, and the secretary, Mr. Nathaniel Baker.

THE new Statutes for the University of Cambridge, which have just been approved by the Queen in Council, provide for a degree of Bachelor of Surgery in the University.

THE Council of the University of Melbourne has appointed Dr. S. Dougan Bird to be Lecturer on Medicine, in the place of Dr. James Robertson, resigned. Dr. John Williams has been appointed to succeed Dr. Bird in the chair of Materia Medica, Therapeutics, and Medical Botany. Dr. Allen has been appointed Lecturer on Anatomy and Physiology.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Runcorn (*Urban*).—Mr. Mouritz reports for 1881 a death-rate of 16 per 1000 of the population. He states that the arrangements for combating the spread of infectious diseases were far from satisfactory. The question of providing suitable hospital accommodation for the treatment of cases of an infectious nature has several times, it would appear, occupied the attention of the sanitary authority, and Mr. Mouritz expresses a hope that this consideration "will shortly result in permanent good." But alas! this hope has been so long entertained that we are disposed to regard it as futile.

Gravesend (*Urban*).—Dr. Gramshaw reports for this borough in 1881 deaths to the number of 498, and births to the number of 669. "Notwithstanding the increase in the extent of the town," remarks Dr. Gramshaw, "and the smaller number of unoccupied houses, the number of births has slowly decreased since 1876, in which year it was highest up to the present year. But the amount of excess does not decrease in the same manner nor at all—that of 1876, in which there was an epidemic of small-pox, being larger than that of 1874 or 1875." The principal disease event of 1881 was an outbreak of small-pox in the borough. On the appearance of the disease Dr. Gramshaw would willingly have had the earliest case removed to the "sanatorium," and the friends being unwilling, an attempt was made to induce the magistrates to give an order for the admission. But the bench held this would be to act with an excess of severity The isolation of the case was thus imperfectly secured; the contagion spread pretty generally in the town; and in the end about sixty cases occurred, of which six proved fatal. In a previous outbreak about 200 cases occurred and thirty deaths. Dr. Gramshaw accounts for this difference by the diligence with which vaccination and revaccination had been pushed in the interval between the two outbreaks. Dr. Gramshaw has still to complain of the nuisance caused by the cartage of manure through the streets of the borough, and states that this is done "with less care than before." The nuisance appears to be augmented by the deposit of the collected manure on a high bank at the railway station for the convenience of its transference to the railway trucks. He again condemns generally the well water obtained within the town, and speaks of the water company's supply as "extremely pure."

Uxbridge (*Rural*).—Mr. Charles Roberts congratulates the Rural Sanitary Authority that the return of deaths for 1881 is "by far the lowest death-return" since the authority was formed, and observes that since the year 1875 there has been, with the exception of one year, 1879, a steady decrease in the annual mortality of the district. Of the parishes forming the district, Norwood seems to have needed most attention. Local outbreaks of enteric fever were noticed there. Of one of these Mr. Roberts remarks: "I found the disease to have undoubtedly arisen from drinking impure water, and I am glad to report that water from the waterworks was quickly supplied to these cottages." Of another outbreak he reports: "At the latter end of November and during December typhoid fever rapidly spread in Harewood-terrace from No. 13 to 30; the cases numbered in all thirty-three. I made a special report to your Board on January 6th of the present year, and gave it as my opinion that the disease arose from impure water, bad drainage, and the deposit of a large quantity of soft core on a wharf close by . . . . I have further examined this locality, and am quite confirmed in the opinion I then expressed, and I would advise that the wells should be

closed, and water from the waterworks laid on. Also that the cesspools, fourteen in number, should be done away with, and that soft core should not be deposited on the wharf." At Hillingdon cases of enteric fever are reported in connexion with closets "too closely attached to the cottages," and a fatal case of diarrhœa in a child "due to having drunk polluted water." Mr. Roberts found here, moreover, "several cesspools and two wells in close proximity in a cramped space." In fact, Mr. Roberts's recommendations to the authority for the coming year involve the doing away with cesspits where practicable, the connexion of drains with sewers, the closure of impure wells, and the greater use of the water from the waterworks.

Huntingdon (Rural)—Alconbury and Sawtry.—Mr. Lancelot Newton reports for this portion of the Huntingdon (Rural) district a death-rate in 1881 of 17·6 per 1000 population, and a birth-rate of 27·6 per 1000, the combined death-rate being 15 per 1000, and birth-rate 33 per 1000. Scarlet fever, whooping-cough, and measles were prevalent in the district, but not in a fatal form, and Mr. Newton speaks hopefully of the co-operation of the people in the abatement of nuisances. The privy nuisance, which claims pre-eminence here, has been less frequent, and Mr. Newton is of opinion that as the pail-system becomes more general it will eventually cease. He would have the Sanitary Committee issue a notice for a "model privy" for the guidance of cottage owners, the model being a pail-privy, to which he attributes special merits in its application to a rural district.

Newtown and Llanidloes (Rural).—Mr. W. Pratt reports for 1881 a death-rate of 15·8 per 1000 of the population. Of deaths among children under five years of age, he remarks: "They are certainly too many. They arise principally, in my experience, from the ignorance of the mothers, and will undoubtedly diminish with the progress of education." A fatal outbreak of diphtheria in the district gives occasion for the observation that "had there been a hospital for infectious diseases in the neighbourhood, to which the sufferers might have been sent at the very commencement, lives I am sure would have been saved. There ought to be such a hospital in every Union, and before many years pass by I hope that such an institution will be found at least in the Newtown and Llanidloes Union." Brief and slight outbreaks of scarlet fever and measles affected parts of the district. Not many sanitary improvements were carried out during the year, but Mr. Pratt has firm faith in progress with the advancement of education.

A curious case is related as recently before the Bristol guardians, in which a man, presumably under the initial stages of typhus, was found in a state of semi-consciousness, and dealt with, first, as being drunk; next, sent to gaol, where he was put upon the treadmill, and subsequently to oakum-picking, to both of which he proved unequal physically; ultimately discharged, he made his way to the workhouse, where he was discovered to be suffering from well-marked typhus. This story is now emphatically contradicted by the governor of the gaol, and it is stated that the man was not declared to be affected with typhus until four days after his discharge from prison.

A virulent epidemic of measles is reported to be prevalent at Chipping and Thorneley-with-Wheatley, in the Clitheroe Union. The first case appears to have been imported from Great Harwood soon after Christmas. The sanitary authority has given instructions that the schools, which, as usual, seem to have been the principal means of the diffusion of the disease, should be closed, and has issued a notice warning parents that they are liable to a fine of £5 for allowing a child suffering from infectious disease to be in any public place.

At a recent meeting of the Aberdeen Town Council, Dr. Beveridge directed attention to some observations in the medical officer's report on the sanitary condition of Torry, on the outskirts of the city. Within a few months 100 cases of typhoid fever had occurred in the place, and at the present moment measles is very prevalent. As fast as the affection was stamped out in Aberdeen, the disease was re-introduced from Torry, and he moved that the Board of Supervision should be memorialised on the subject.

The Sanitary Committee of the Brighton Town Council have resolved to recommend a system of registration of cases of infectious disease, and have decided that the Local Government Board be moved to introduce a measure into Parliament to render such registration compulsory.

The *London Gazette* of the 10th inst. declares the 90th section of the Public Health Act, 1875—referring to houses let in lodgings—to be in force within the district of Edmonton.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns, 6149 births and 3891 deaths were registered during the week ending 11th inst. The annual death-rate in these towns, which in the four preceding weeks had steadily declined from 29·8 to 24·5 per 1000, further fell last week to 24·0. The lowest death-rates in these towns last week were 16·9 in Birmingham, 18·1 in Oldham and Birkenhead, and 18·2 in Plymouth. The rates ranged upwards in the other towns to 30·0 in Halifax, 30·5 in Brighton, 31·1 in Norwich, and 31·4 in Blackburn. The deaths referred to the principal zymotic diseases in the twenty-eight towns declined to 585, and were fewer than in any of the six preceding weeks; 233 resulted from whooping-cough, 144 from measles, 68 from scarlet fever, 48 from diarrhœa, 38 from fever (principally enteric), 29 from diphtheria, and 25 from small-pox. The lowest death-rate from these zymotic diseases occurred last week in Sheffield, while the highest rates were returned in Blackburn, Preston, and Brighton. Whooping-cough showed the largest proportional fatality in Bristol, London, and Brighton; measles in Blackburn, Norwich, and Preston; scarlet fever in Hull and Cardiff; and "fever" in Portsmouth. The 29 deaths from diphtheria in the twenty-eight towns included 15 in London, 6 in Portsmouth, and 3 in Manchester. Small-pox caused 22 more deaths in London and its suburban districts, 4 in Nottingham, and one each in Bolton and Hull. The number of small-pox patients in the metropolitan asylum hospitals, which had steadily declined in the preceding six weeks from 504 to 407, had further fallen to 390 on Saturday last. The new cases of small-pox admitted to these hospitals were 47 last week, against 89 and 45 in the two preceding weeks. The deaths referred to diseases of the respiratory organs in London, which had steadily declined from 994 to 470 in the four previous weeks, were 473 last week, and 14 below the corrected weekly average. The causes of 94, or 2·4 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. The proportion of uncertified deaths did not exceed 1·5 per cent. in London, whereas it averaged 3·2 in the twenty-seven provincial towns. All the causes of death were duly certified in Birmingham, Nottingham, Portsmouth, and in four other smaller towns; while the proportions of uncertified deaths were largest in Bolton, Salford, and Huddersfield.

HEALTH OF SCOTCH TOWNS.

The annual death-rate in the eight Scotch towns, which had declined from 24·7 to 21·6 per 1000 in the four preceding weeks, rose to 23·6 in the week ending the 11th inst.; this was 0·4 below the average rate in the twenty-eight large English towns. The deaths referred to the principal zymotic diseases in these Scotch towns, which had been 85 and 77 in the two previous weeks, further declined last week to 75; of these, 20 resulted from whooping-cough, 19 from diarrhœa, 12 from diphtheria, 8 from "fever," 8 from measles, 7 from scarlet fever, and one from small-pox. The annual death-rate from these zymotic diseases was equal to 3·2 per 1000, and was 0·4 below the mean rate from the same diseases in the large English towns. The zymotic death-rate in the eight Scotch towns ranged upwards from 0·7 and 0·8 in Dundee and Leith to 5·2 and 6·9 in Greenock and Perth. The 20 fatal cases of whooping-cough showed a further increase upon recent weekly numbers, and included 14 in Glasgow and 4 in Edinburgh. The fatality of diarrhœa was also excessive, especially in Edinburgh and Aberdeen. Of the 12 deaths from diphtheria, showing a further decline from the numbers in recent weeks, 5 occurred in Glasgow, 4 in Greenock, and 2 in Edinburgh. The 8 deaths referred to "fever" included 4 in Edinburgh and 3 in Glasgow. Five of the 7 fatal cases of scarlet fever occurred in Glasgow, and the 8 deaths from measles included 3 in Perth. The fatal case of small-pox was of an adult male in the Edinburgh City Hospital. The 118 reported deaths from acute diseases of the lungs in the eight towns showed a considerable decline from recent weekly numbers, and were 50 below the number

returned in the corresponding week of 1881. The deaths of infants under one year of age were more numerous than in any recent week.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 33·6 and 35·1 per 1000 in the two preceding weeks, further rose to 37·2 in the week ending 11th inst. During the first ten weeks of the current quarter the death-rate in the city averaged 35·5 against 26·3 in London, and 20·1 in Edinburgh. The 248 deaths in Dublin last week showed a further increase of 14 upon the numbers in the two previous weeks; 31 were referred to measles, 8 to fever, 4 to diarrhœa, 1 to scarlet-fever, 1 to whooping-cough, and not one either to small-pox or diphtheria. The 45 deaths from these principal zymotic diseases were equal to an annual rate of 6·7 per 1000 in the city; the death-rate from the same diseases was 4·1 in London and 3·8 in Edinburgh. The fatal cases of measles in Dublin, which had been 39 and 27 in the two previous weeks, rose again to 31 last week; during the first ten weeks of this year, no fewer than 348 deaths from this disease have been recorded within the city. The 8 deaths referred to "fever" showed a marked further increase upon recent weekly numbers; and those attributed to diarrhœa were also more numerous. The deaths, both of infants and elderly persons, showed a decline from the numbers in the previous week.

THE SERVICES.

ARMY MEDICAL DEPARTMENT.—The undermentioned Surgeons on probation to be Surgeons, dated the 4th of February, 1882:—Norman Macbeth Reid, William Henry Phillips Lewis, William Dick, M.B., Francis John Jencken, M.B., Henry Ogilvy Stuart, Francis Harper Treherne, Samuel Foster Lougheed, M.D., John Courtenay Haslett, M.D., Herbert James Barratt, Herbert Ellison Rhodes James, Henry Octavius Trevor, Alexander Fraser Russell, M.B., Robert James Fayle, John William Jerome, William Watson Pike, Michael Edward FitzGerald, Lewis Haywood Truefitt, M.B., James Murray Irwin, M.B., Patrick Joseph Nealon, M.D., Earnest Octavius Wight, William Albert Morris, Francis Henry Merceron Burton, M.B., Joseph Heath, M.B., Charles Edward Nichol, M.B.

YEOMANRY CAVALRY.—Denbighshire: Surgeon Thomas Eyton-Jones is granted the honorary rank of Surgeon-Major.

RIFLE VOLUNTEERS.—4th Cheshire: Surgeon Robert Hopwood is granted the honorary rank of Surgeon-Major.—2nd Derbyshire: Surgeon Edward Mason Wrench is granted the honorary rank of Surgeon-Major.—23rd Middlesex: William Joseph Atkinson, Gent., to be acting Surgeon.—1st Somersetshire: Acting Surgeon Robert Westmore Thomas to be Surgeon.

ADMIRALTY.—The undermentioned gentlemen have been entered as Surgeons in Her Majesty's Fleet, with seniority of Feb. 27th, 1882:—William George Kynaston Barnes, M.D.; Robert James McCormack, M.D.; William Gordon Cumming Smith, M.B.; Septimus Farmer, Andrew Dillon Peyton, James Stewart Wray.

The following appointments have been made:—Staff Surgeon William D. Wodsworth, to the *Sylvia* (commissioned); Surgeon Ernest E. Bray, to the *Amethyst*; Surgeon Alexander Flood, to the *Warrior*, additional, vice Mitchell; Surgeon John Price, to the *Cambridge*, vice Browning; Surgeon William R. White, to the *Bullfrog* (commissioned); Surgeon Richard E. Biddulph, to the *Royal Adelaide*, vice W. R. White; Fleet Surgeon Edward T. Mortimer, to Her Majesty's ship *Duncan*, additional for temporary service at the Royal Marine Depôt at Walmer.

AT the annual meeting of the governors and subscribers of the Hastings and St. Leonards Infirmary the question of site formed the principal subject of discussion, but was left undecided. A sense of the inadequacy of the present building appears to be pretty general, but there is great difference of opinion as to the feasibility of the respective propositions to enlarge the infirmary or to construct a new edifice on another site.

REGINA v. LAMSON.

ON Wednesday, March 8th, 1882, at the Central Criminal Court, before Mr. Justice Hawkins, George Henry Lamson, aged twenty-nine, surgeon, was indicted for the wilful murder, on December 3rd, 1881, of his brother-in-law, Percy Malcolm John, aged nineteen.

Percy Malcolm John, who was a cripple with curvature of the spine and paraplegia, had property to the extent of £3000, half of which at his death would revert to the prisoner's wife. John had, for the three years prior to his death, been at Blenheim House School, at Wimbledom, kept by Mr. W. H. Bedbrook. On December 3rd, 1881, John was, with the exception of his paralysis, in good general health, and on that day had taken his meals, breakfast, dinner, and tea, in company with Mr. Bedbrook among others. On Saturday, December 3rd, Lamson called on John at Blenheim House at 6.55 P.M., and their interview took place in the dining-room of Blenheim House, in the presence of Mr. Bedbrook. Mr. Bedbrook offered Lamson some wine, which he accepted, and Lamson then asked for some sugar, as the wine (sherry) was rather strong, and he said "sugar would destroy the alcoholic effects." A basin of white sugar was brought, and Lamson put some of it into his sherry. Lamson then produced a Dundee cake and some sweets, of which all three partook. At 7.15 P.M. Lamson produced a box of gelatine capsules from his pocket, and said, "Oh, by the way, Mr. Bedbrook, when I was in America I thought of you and your boys. I thought what excellent things these capsules would be for your boys to take nauseous medicines in." Lamson then gave a capsule to Mr. Bedbrook, and filling another with sugar handed it to John, and said, "Here, Percy, you are a swell pill-taker; take this, and show Mr. Bedbrook how easily it may be swallowed." John swallowed the capsule; the prisoner soon said, "I must be going, and at 7.21 P.M. left the house. A little after 8 P.M. John complained of heartburn, and soon after said, "I feel as I felt after my brother-in-law had given me a quinine pill at Shanklin." He was carried up to his bedroom and about 9 P.M. was found in great pain and vomiting. He complained that "his throat appeared to be closing, and the skin of his face felt drawn up." At 11.30 P.M. he died. John was treated by linseed poultices to the abdomen, white of egg beaten up with water, and two hypodermic injections of morphia of one-sixth of a grain and a quarter of a grain respectively.

The post-mortem examination of John's body was made on Dec. 6th, 1881, by Dr. Little and Mr. Berry of Wimbledon, and Mr. Bond of the Westminster Hospital. The spinal disease was found to be old and inactive. There were some old adhesions of the lung. The lips and tongue were pale. The cerebral meninges, liver, kidneys, spleen, and the mucous membrane of the stomach were much congested. The mouth and lips were pale. On the under surface of the large end of the stomach were six or eight yellowish-grey patches, a little raised, about the size of a small bean, and towards the smaller end were two or three similar ones. The heart was almost empty, but healthy. The lungs were congested, the posterior parts very much so.

The analyses of the viscera, vomit, and the articles of which John might have partaken were conducted by Dr. Stevenson, of Guy's Hospital, in conjunction with Dr. Dupré, of the Westminster Hospital, and the results obtained by the one were verified by the other.

The results were briefly as follows:—

1. Portions of the liver, spleen, and kidneys treated by Stas's process gave evidence of slight traces of morphia, and the alkaloidal extract when placed upon the tongue produced the numb tingling sensation which is characteristic of aconite, and which, for the sake of brevity, we will call aconitism.

2. The contents of the stomach similarly treated produced aconitism.

3. The stomach itself similarly treated showed the presence of an alkaloid, but the extract failed to produce aconitism.

4. The urine gave evidence of morphia and aconitine, and the extract obtained from an ounce of the urine killed a mouse in thirty minutes when injected under its skin; the

symptoms being exactly similar to those produced by injecting a minute quantity of a solution of Morson's aconitine.

5. A mixture of the extracts from 1, 2, and 3, when injected under the skin of a mouse, killed it with similar symptoms in twenty-two minutes.

6. The vomit was found to contain muscle, starch, onion, vegetable pulp (probably apple), raisins, candied peel, and pine-apple essence. It contained neither morphia nor quinine, but very marked aconitism was produced by a minute quantity of the extract, which lasted for over six hours, and when injected under the skin of a mouse it produced powerful symptoms in two and a half minutes, and killed it in a quarter of an hour.

Dr. Stevenson considered that the vomit contained as much as a quarter of a grain of aconitine.

In the beginning of 1881 Mr. Bedbrook received a letter from Lamson, who was then in America, and a box containing a dozen pills. The letter requested Bedbrook to give the pills to John, as Lamson had heard of cases in America similar to that of John being benefited by the pills in question. The deceased had taken one of the pills, and the next morning complained of being very unwell, and said he should take no more of the pills. On Aug. 28th Lamson bought three grains of sulphate of atropine and one grain of aconitine of Mr. Albert Smith, a druggist of Ventnor. On Aug. 29th Percy John, who was staying in the house of a Mrs. Jolliffe at Ventnor, was taken ill with diarrhœa and prostration, and a feeling "as if he were paralysed all over."

Lamson was living with his father in Ventnor between August 6th and October 23rd, 1881, and was in the habit of going to the house where Percy John was living, and had actually called upon him on the 29th. On Oct. 13th he bought twelve quinine powders (containing a grain and a half each) of Mr. Littlefield, a druggist of Ventnor. John at the time of his death was taking quinine powders which had been supplied to him by Lamson. On Nov. 11th Lamson had bought of Bell and Co. half an ounce of a mixed solution of morphia and atropia, containing forty grains of morphia and one grain of atropia, and on the 16th of November he bought the same amount of a similar solution. On Nov. 16th he also asked for five grains of digitaline, which were not given to him because the sample in stock was not thought to be good, and on the 20th of November he asked for one grain of aconitine, with which the assistant in the shop refused to serve him. On Nov. 24th he purchased two grains of aconitine of Messrs. Allen and Hanburys.

Among the effects of the deceased were found twenty quinine powders numbered from 1 to 20. Nos. 1, 2, 3, 4, 5, and 6 were in larger papers than the rest, and the powders were nearly uniform in weight, containing about one grain and a half of quinine in each. Nos. 7 to 20 inclusive were wrapped in smaller papers and varied in weight from 6-10ths of a grain to $1\frac{6}{10}$ths of a grain. Nos. 16, 17, and 19 differed in appearance from the rest, having an admixture of a pale fawn-coloured substance. They all contained aconitine. No. 16 contained ·83 grain of aconitine and ·96 grain of quinine. One-fiftieth of a grain of the aconitine contained in this powder killed a mouse in six minutes and a half. One of the pills which had been sent by Lamson from America was found to contain nearly half a grain of aconitine. Some of it injected into the back of a mouse killed the animal in less than five minutes, and the aconitism produced by a small quantity on the tongues and throats of the experimenters lasts for over seven hours. Witnesses were called to prove that Lamson would benefit pecuniarily by the death of the deceased, and that at the time of John's death he was a bankrupt without a penny in the world.

No witnesses were called for the defence. The counsel for the defence was unable to bring forward any solid arguments in refutation of the evidence and the opinions of the experts, and the jury after deliberating thirty-five minutes returned a verdict of Guilty. Sentence of death was passed in the usual form.

ABERDEEN ROYAL INFIRMARY.—The income of this infirmary for the past year amounted to £6689 5*s.* 11*d.*, and the expenditure to £6781 17*s.* 9*d.* Of the latter sum £2718 was expended in provisions &c., £882 being the cost of wines, medicines, and surgical instruments and appliances. The average number of patients in hospital was 178.

ROYAL COLLEGE OF PHYSICIANS.

THE following is the congratulatory address forwarded by the Royal College of Physicians to the Queen:—

To the Queen's Most Excellent Majesty.

MOST GRACIOUS SOVEREIGN,—We, your Majesty's most dutiful and loyal subjects, the President and College or Commonalty of the Faculty of Physicians of London, approach your Majesty most respectfully to express our abhorrence of the crime which has been committed against your Majesty's person, and to offer to your Majesty our loyal and fervent congratulations that by the merciful dispensation of the Almighty, the hand of the assassin has been rendered powerless. We heartily join in the universal feeling of thankfulness to God that your Majesty's life has been spared, and we pray that it may please the Almighty to preserve it for many years still to be a blessing to the millions of your Majesty's subjects.

WILLS AND BEQUESTS.

THE will of Samuel Hitch, M.D., of Barawood House, Upperton-road, Eastbourne, who died on September 29th, last, was proved on the 7th inst. by Mrs. Letitia Anne Hitch, the widow and surviving executrix, the personal estate being sworn under £1000. The testator gives and bequeaths all his personal estate to his wife for her own absolute use and benefit.

The will of Henry John Yeld, M.D., of Bishopwearmouth, Durham, who died on November 18th last, was proved on the 25th ult., at the Durham district registry, by the Rev. Reginald H. Yeld, the brother, and Dr. Charles Hitchman Braddon, the executors, the personal estate being sworn under £600. The testator leaves all his property upon trust for the benefit of his wife and four daughters.

The following legacies have recently been left to hospitals and other medical charities:—Mr. Osgood Torkington of Holly Lodge, Clapham Park (in addition to those mentioned in our columns of the 4th inst.), £1000 Consols each to the East London Hospital for Children at Ratcliff-cross, the Hospital for Epilepsy and Paralysis, Portland-terrace, Regent's-park; the Evelina Hospital, Southwark Bridge-road; the Samaritan Free Hospital for Women and Children, Lower Seymour-street, Portman-square; the London Homœopathic Hospital, Great Ormond-street; the West London Hospital, Hammersmith-road; Victoria Hospital, Gough House, Queen's-road, Chelsea; the North Eastern Hospital for Children, Hackney; and the Hospital for Women, Soho-square; £50 to the Clapham Dispensary, Manor-street, Clapham; £6666 13*s.* 4*d.* Consols, on the death of Emma Clayton, between the Metropolitan Free Hospital, Commercial-road East, the Cancer Hospital, Brompton, the Royal Free Hospital, Gray's Inn-road, and the Westminster Hospital, Broad Sanctuary; £6666 13*s.* 4*d.* Consols, on the death of Clara Worges, between the Charing-cross Hospital, Middlesex Hospital, St. Mary's Hospital, Paddington, and the Great Northern Hospital; £3333 6*s.* 8*d.* Consols, on the death of Eliza Dinah Torkington, between the North London or University College Hospital and St. Mark's Hospital, City-road; £3333 6*s.* 8*d.*, on the death of Susannah Frances Gleeson, between King's College Hospital, Portugal-street, and Poplar Hospital, East India Dock-road; £5000, New Three per cents., on the death of Selina Smith, between the Westminster Ophthalmic Hospital, King William-street, the Royal Orthopædic Hospital, Oxford-street, and the Children's Hospital, Great Ormond-street.—Colonel Cecil William Forester, of Admaston, Wrockwardine, Salop, formerly Assistant Sergeant-at-Arms to the House of Commons, on the death of his brother, George Townsend Forester, £2500 to the Westminster Hospital, Broad Sanctuary; £2000 to the County of Salop Infirmary; £1000 each to the Hospital for Consumption and Diseases of the Chest, Brompton, and the Royal Hospital for Incurables, Putney; and £5000 to the Western Dispensary, Broadway, Westminster.—Mr. John Jones of 95, Piccadilly, £2000 each to Charing-cross Hospital, West Strand, and St. George's Hospital, Hyde-park-corner; £1000 each to the Westminster Hospital, Broadway, the Free Hospital, Gray's-inn-road, and

St. Mark's Hospital, City-road; and the residue of the personalty, which probably amounts to between £100,000 and £200,000, to the National Hospital for Consumption and Diseases of the Chest, Ventnor.—The Hon. Alexander Leslie-Melville of Branston Hall, Lincolnshire, £100 to the Lincoln County Hospital and £50 to the Lincoln Dispensary.—Mr. Charles Henry Turner of High Cliff House, Dawlish, £50 each to the Exeter Eye Infirmary, the Exeter Blind Asylum, Dawlish Hospital, Wanford House Lunatic Asylum, the Exeter Dispensary, and the Dawlish Dispensary.—Mr. Thomas Metcalfe Smith, formerly a corn and wine merchant, of Lincoln, has bequeathed £10,000 to the Lincoln County Hospital and £5000 to the Dispensary.

Correspondence.

"Audi alteram partem."

ANÆSTHETICS.

To the Editor of THE LANCET.

SIR,—I quite agree with one of your correspondents that the personal experience of one man goes for very little; still, "you speak of a man as you find him," and so with anæsthetics, your own personal experience is, after all, the thing that gives you confidence. I still stand to my guns, and assert that methylene, given through Junker's inhaler, is the closest approximate to a perfectly safe anæsthetic that we have. It is not quite fair of Dr. Jacob to assert that I regard with equanimity the long list of chloroform deaths; but I decline any longer to submit to a species of terrorism which has of late been exercised over the profession. We have been told in effect that the use of any other anæsthetic than ether is nothing less than a crime; and now we are beginning to find out that ether has its dangers. Four, not two, deaths (as stated by Dr. Jacob) from ether have been reported during the last twelve months; and two others, in which ether played its part, making six in all. I myself lost a patient during an amputation; and although I gave ether the benefit of the doubt, and attributed the death to shock, still the fact remains that ether was the anæsthetic used, and that the man died during its inhalation. Then I see another death reported from New York; so that in all during the last twelve months eight deaths have occurred under the influence of ether, or mixtures with ether; and this is the perfectly safe anæsthetic which we are bound over with all sorts of pains and penalties to use, and none other! I am quite aware that methylene depreciates after the bottle is once opened; but that is easily remedied, as the makers put it up in small ounce and a half bottles. I believe I am correct in stating that it has been used almost exclusively at the South Devon Hospital for many years without a single mishap; and my friend Mr. W. Square tells me that he employs it almost invariably at the Eye Infirmary. Its use among dentists is also very general; so that in the course of the year it must be given many thousands of times; and any mishap in a dentist's room would be quite sure to attract public attention. I can therefore hardly agree with Dr. Jacob's dictum, that methylene is very little used; and if he can produce only ten recorded deaths during the last ten years, why, I think my case in its favour is fairly proved.

I am, Sir, yours faithfully,

Plymouth, March 12th, 1882. PAUL SWAIN.

DEATH FROM THE SHOCK OF EXTRACTING A TOOTH.

To the Editor of THE LANCET.

SIR,—When in charge of a friend's practice at Bristol some time ago, I received one day a very urgent call to proceed at once to a neighbouring dentist's. On arriving there I found a stout woman, aged fifty, lying on the consulting-room floor, insensible; the face pale and of a faint purplish tint, the pupils equal and of about normal size, the breathing feeble and quiet, the pulse and cardiac movements imperceptible. The woman, an old patient of the dentist, came that morning, apparently in her usual health, to have a decayed bicuspid tooth extracted. Being well aware that she had a weak heart, he refused this time, as he had done on several previous occasions, to give her any anæsthetic. In the presence of the patient's friends the tooth was easily drawn without it; but a few minutes afterwards she "went off in a faint." Failing to revive her, he sent at once for the nearest surgeon. In the course of about five minutes I arrived, and at once examined the throat for a foreign body, but failed to detect anything, and was assured that her artificial teeth had been removed before the operation commenced, the complete set being now produced. Every available means was tried to restore her, but in vain. A little later her own doctor arrived, under whose care she had been for several years. He was well known to me, and I can place implicit reliance on his statement, which was to the effect that she had suffered for several years from palpitation and shortness of breath, without having had any murmur or other sign of organic heart disease.

No post-mortem examination could be obtained. It was evidently a case of death from syncope, resulting from the shock of extracting a tooth. Had an anæsthetic unfortunately been administered, the death would certainly have been attributed to it.

No doubt a considerable number of persons are living in a similar condition—balancing between life and death—to whom the slightest shock may prove fatal, although it is often impossible to detect in them any disease either during life or after death. Many such persons inevitably die, in spite of every precaution, when anæstheticised, no matter what agent may be employed, or when submitted to a surgical operation without any. The distinct recognition of this class of cases by the public, as well as by the profession, is a matter of the greatest importance; otherwise medical men may be most unjustly blamed for unfortunate eventualities quite beyond their control.

I am, Sir, sincerely yours,

W. ROGER WILLIAMS, F.R.C.S.,

March 11th, 1882. Surgical Registrar, Middlesex Hospital.

NEW SCHEME OF EDUCATION AT THE ROYAL COLLEGE OF SURGEONS, IRELAND.

To the Editor of THE LANCET.

SIR,—I feel bound to support your statements on this subject in THE LANCET for Feb. 25th, pages 317-327, to reiterate the facts in my former letter, and to controvert the assertions of Dr. Jacob in his communication of the 11th inst. We asked only two Fellows of the Irish College resident in London to accompany the deputation, simply because these gentlemen were formerly Irish hospital surgeons, and as such might naturally be expected to take an interest in the subject. The distinguished naval surgeon mentioned having signed the memorial in August last, now volunteered to come with us, which he did, but, after having been introduced to the Home Secretary by Dr. Farquharson, M.P., was forced to leave the House of Commons—having waited for two hours previously—owing to an imperative engagement for six o'clock.

I will only further add that I feel sure the number of Fellows who oppose the scheme will at the approaching annual meeting of the College be found to have multiplied instead of having "melted away."

I am, Sir, yours truly

LAMBERT H. ORMSBY, F.R.C.S.I.

Merrion-square West, Dublin, March 14th, 1882.

NOTIFICATION OF INFECTIOUS DISEASES.

To the Editor of THE LANCET.

SIR,—As it has been for some time a question of much importance to the medical profession, and to the public at large, as to how far the discretionary powers vested in a medical officer of health with respect to the removal of infectious cases extend, I am induced to place before you a few facts, and ask your opinion respecting the same. Early in July last, I was in attendance upon a patient suffering from a doubtful case of typhoid fever, who resided within one hundred yards of my own door, and, as was my duty, took all precautions to have the case isolated, so as

to prevent any chance of the disease spreading, of which, indeed, there was no reasonable fear. The medical officer, however, got wind of the case, and without having the courtesy to write or speak to me upon the subject, visited my patient, and had him at once removed to the hospital, nor afterwards did he make any explanation concerning his act. A few days ago another case occurred. I was called to a public-house, to see an only child, a little girl suffering from scarlet fever. As no lodgers were taken or travellers allowed to sleep in the house, I had the bedroom stripped of all articles liable to retain or spread infection, the room disinfected with carbolic acid, and a special nurse provided; then duly reported the case, as bound to do under the Improvement Act, stating that I considered the isolation complete. The medical officer called and insisted on the child's immediate removal, though it was greatly against the wish of the parents, who even offered to take an empty house in the neighbourhood if they might be allowed to keep the child out of the hospital. But of no avail were their entreaties; the child was marched off. What I require to know is how far I can resist such arbitrary measures, and what in future I am to do.

I am, Sir, yours truly,

March 7th, 1882. F. A. C.

ACONITE.

To the Editor of THE LANCET.

SIR,—I have copied out the enclosed from an old work in my possession, in order that you may insert it in your journal if you think the contents sufficiently interesting.

I am, Sir, yours faithfully,

S. L. WALLACE, L.R.C.S.E., L.R.C.P.E.

Brockley, S.E., March 15th, 1882.

"Aconite, myoctonon, a plant famous among the ancients, both in quality of a poison and a remedy. Aconitum is laid down by some to take its name from Aconæ, a city in Bithynia, where it grows in great abundance, though it is also found in other places, particularly the mountains about Trent; others derive it from ακωνη, a rock naked or bare of earth, whereon the plant readily thrives. It was called μυοκτονον, as killing mice with its bare smell, according to Pliny. The poets feign it to have arose from the foam of the dog Cerberus, when Hercules dragged him out of hell. The ancient botanists gave the name aconite to several plants of different kinds; one species they called 'Lycoctonum,' wolfsbane, or 'Cynoctonum,' dogsbane, from its effects; of this they had likewise their divisions, as the 'Napellus,' thus called 'a napo,' because its root resembled the turnip kind. Another called anthora, or antithora, good against disorders of the thorax. The class of aconites is held extremely caustic and acrimonious, which end in mortifications, with which the ancients were so surprised that they were afraid to touch them; and hence a thousand superstitious precautions about the manner of gathering them. Their roots are held of service in malignant fevers, and accordingly make an ingredient in some orvietans, and other alexipharmic compositions. The ancients used this plant against the sting of the scorpion, which is said to be deadened by the touch of the aconite, and restored to its vigour by that of hellebore. Theophrastus relates that they had a way of preparing it in those days so as it should only destroy at the end of one or two years. Arrows dipped in its juice prove mortal, wherever they wound. The Indians use aconite, corrected in cow's urine, with great success against fever."

THE UNIVERSITY OF LONDON.

To the Editor of THE LANCET.

SIR,—The remarkable pathological effusion from Dr. Wickham Legg's pen, published in your issue of March 4th, needs little comment. However, I beg to add my protest to that of "M.D.'s" in your last issue, to the right of Dr. Wickham Legg to speak *ex cathedrâ* on the part of the medical graduates of the University of London. I also wish to ask him on what grounds he bases his modest opinion that his name "serves as a trap or decoy for younger and inexperienced men."

I am Sir, your obedient servant,

March 14th, 1882. M.D., B.S. LOND.

GLASGOW.

(From our own Correspondent.)

IT seems as if money were becoming more plentiful in Glasgow again. The grand Calico Ball held in Glasgow a short time ago, in aid of the funds of the Royal and Western Infirmaries, was a great success, £1300 having been sent by the treasurer of the Ball Committee to each of the institutions named. Miss B. Clugston, a lady well known in charitable circles, is again before the public with a grand bazaar in aid of the Broomhill Home for Incurables; she is in want of not less than £16,000, and bids fair to get it, as the first day of the week's bazaar has brought in £4000.

In view of the improvement in trade generally, the Southern Hospital Scheme has apparently a better chance of success now than it had a few years ago. The scheme is gradually taking definite shape. It is understood that the Town Council of Glasgow have made the hospital committee a virtual offer of a very suitable site in the Langside district. The need for such an institution is demonstrated by a notice which the directors of the Royal Infirmary had to issue a few days ago, to the effect that "as the wards are full and numbers waiting admission, it is requested that subscribers before sending patients communicate with the superintendent to ascertain if they can be received."

Complaints having been made to the parochial authorities regarding lunatic paupers resident in Smithson (a lunatic asylum near Greenock) being found on the public roads, the majority of the Committee of Management decided after inquiry that in future lunatic patients be kept within the grounds of the institution, which extend to about eighty acres. The matter was subsequently laid before the Commissioners in Lunacy, in the form of a series of queries, and recently Drs. Mitchell and Sibbald, Edinburgh, visited Greenock and made an investigation into the administration of the asylum. Their report has since been received, and was read on Monday at a private meeting of the Committee of Management of the Parochial Board. The main features of the report are that the medical officer (Dr. Wallace) has the entire control as to what exercise patients should be allowed to take unaccompanied by attendants either within or beyond the grounds, and also what liberty should be permitted to patients beyond the grounds under the care of attendants. This treatment of the patients, the Commissioners say, is entirely within the province of the medical officer, and, so long as he holds the office, he cannot be safely or properly interfered with in the matter. In the opinion of the Commissioners Dr. Wallace has acted judiciously in the course he has pursued. The Commissioners pay a high tribute to the zeal and ability of Dr. Wallace, and to the efficient administration of Mr. Hardie, the governor, and the other officials of the institution.

IRELAND.

(From our own Correspondent.)

A VERY interesting paper, on a case of apparent recovery from Addison's disease, was recently read by Dr. Magee Finny at a meeting of the Medical Society of the College of Physicians. The patient, a widow, aged fifty, first noticed the discolouration of her skin in Nov. 1879, and seven months ago it completely disappeared, the tongue, nails, face, chest, arms, and legs being perfectly free from any morbid deposit. Recovery in Addison's disease is extremely rare; the disease, it is well known, may remain stationary for a long time, and if the constitution does not suffer much, and the appetite is fair, the patient may remain for many years without losing ground. But to improve rapidly in health, and have the discolouration entirely removed, is a very uncommon occurrence indeed. The patient was exhibited at the meeting and examined by the members present. As regards treatment, arsenic was the principal drug administered. At the same meeting the Council of the Society were authorised to confer with representatives of the Pathological Society of Dublin to consider the possibility of an amalgamation of the various medical societies in Dublin—the Obstetrical, Surgical Society of Ireland, Medical Society of the Royal College

of Physicians, and the Pathological Society of Dublin. It is argued that there is not sufficient material for four societies in Dublin, and that a Medico-Chirurgical Society should be established to absorb those at present existing. There are no doubt some advantages to be gained by an amalgamation, but there is something also to be said on the other side of the question, and to overcome these objections I believe will be found a very hard task. The idea originated, I understand, with the Pathological Society of Dublin, not the most flourishing of the medical societies in that city.

The Union Officers' Superannuation Bill, which is being introduced by Mr. Herbert Gladstone, has caused a considerable ferment among Poor-law guardians throughout Ireland. They object to the power being taken out of their hands to refuse a pension to a medical officer, for instance, although he may have retired after many years' service in the union, and have become incapacitated by old age or infirmity from discharging the duties of his post in an efficient manner. Mr. H. Gladstone has already presented over 130 petitions in favour of his Bill; and should it pass, the Local Government Board will have the power, in case the guardians refuse to allow a pension to a deserving officer, to direct superannuation to be given, calculated on the years served. Last week, at a meeting of the Lorne Board of Guardians, it was proposed that Dr. Smylie, late medical officer for Ballycarry Dispensary, being entitled to the full amount of superannuation allowance under the Act, should receive the same; but an amendment, to the effect that no retiring allowance should be granted, was carried by a large majority. If Mr. H. Gladstone's Bill had been in operation, Dr. Smylie could have appealed to the Local Government Board, who would have fixed the amount of his retiring pension.

Among the 19,777 deaths registered in Ireland during the December quarter of 1881, one each was recorded at the alleged ages of 96, 98, 99, 100; and two each at 102 and 103 years.

The report of the Home for Protestant Incurables, Cork, for the past year shows that it is steadily increasing in usefulness, and is rapidly rising from a private into a very large and important public institution. The cost of establishing a bed in the Home is £250.

The United Hospital Football Match played at Ormean last January has returned a sum of £50 towards the funds of the Belfast Royal Hospital.

A deputation from the Cork Fever Hospital last week applied to the Town Council for a half-yearly grant of £800. An objection was made to the grant, as it was pointed out that the fever hospital connected with the Cork Workhouse could accommodate and treat at a less cost a large number of the fever cases which entered the Cork Fever Hospital. After some discussion the amount asked for was allowed, but it was suggested that a smaller sum should be applied for on the next occasion. The hospital has been of great value in the prevention and cure of contagious disease, and the institution is at present nearly £1000 in debt.

PARIS.

(From our own Correspondent.)

PROFESSOR RICHET lately delivered a very interesting clinical lecture at the Hôtel Dieu on the differential diagnosis of cancroid and cancer, in illustration of which he presented the following case. The patient was a woman aged forty-six, who had a small tumour in the right breast, which first appeared in the nipple, and subsequently ulcerated, the disease extending along the lymphatics to the glands in the axilla in the same side. He removed the greater portion of the breast, and pronounced the disease to be a cancroid or spurious cancer for the following reasons. The age of the patient was against its being a true cancer. Cancroids are generally situated at the entrance of natural orifices, such as the mouth, nose, &c.; the nipple may be also included, as it is composed of a collection of lacteal tubes. He calls true cancer "cancer interne," and cancroid "cancer externe," not from their position, but from their origin; the former is a specific blood disease, proceeding from within outwards, and is transmitted principally by heredity. The latter proceeds from without inwards, and, being in its origin a local disease, it should be removed before contamination of the system takes place, in order to insure success. No relapse occurs, and this is why some surgeons boast of cures, as they mistake false for true cancer; in true cancer operation is of no avail, except to remove urgent symptoms, but not in view of a permanent cure.

The settlement of the question, Hospital or no hospital, seems to be as far off as ever it was; and while the subject of the abolition of hospitals on the one side, and that of domiciliary attendance on the poor is being discussed by one portion of the Municipal Council, the other portion—that is, the majority—are not only for the maintenance of these useful institutions, but find them far too inadequate to meet the requirements of the ever-increasing population of this growing city. The arguments on one side are as plausible as on the other; meanwhile both systems are being carried out; and although several new hospitals have been added to those already existing, the wards are literally crammed; for besides the regulation number, extra beds are put up in every available space without the slightest regard to sanitary or insanitary considerations; and yet, notwithstanding this overcrowding, numbers of applicants for admission are daily refused. In a rather severely critical letter, published in the *Journal des Débats*, Dr. Desprès, hospital surgeon, suggests that if the buildings originally intended for the reception of patients were not monopolised by what is called the "administration"—that is, the director and his staff, who are lodged on the premises,—and if other portions were not appropriated to purposes foreign to the immediate interests of patients, there would necessarily be more room available for a greater number of beds, which would relieve the overcrowded wards, and satisfy to a greater extent the demands daily made for admission.

The number of rickety children and hunchbacked adults of both sexes one meets with in this country is something prodigious. According to a report lately published in a scientific journal, the number amounts on an average to 20,000 per annum, the female sex furnishing the greatest majority. Want, unwholesome food, and bad hygienic conditions would in a great measure account for these deformities, but the vile practice so prevalent among French mothers of too early hand-feeding their infants, or bringing them up on the bottle to the exclusion of the breast or the milk of an animal, is no doubt one of the principal sources of rickets, and lays the foundation for the malformation of the osseous system, and indeed for the great bulk of diathetic diseases that affect the inhabitants of civilised countries.

How will the teetotalers reconcile their pledge with the following discovery? M. Muntz, director of the laboratory of the Institut Agronomique, has by means of an apparatus of his own invention discovered the presence of alcohol in water. It is true the proportion is almost infinitesimal, yet it is sufficiently appreciable for him to have fixed it at one-hundred-thousandth part and even less. In pushing his experiments further, he discovered the presence of alcohol in all the natural waters—such as those of the rivers and the sea, and even in rain water and melted snow. For instance, in the water of the Seine and in rain water the proportion of alcohol was about one-thousandth, or one gramme to each cubic metre. The proportion was about the same in the sea water, but a little greater in cold rain water; the proportion was also sensibly greater in sewage water. From the presence of alcohol in rain and river water, M. Muntz concludes that it must also exist in the air, and even in the interior of the earth; so that it may be said to exist everywhere inNature; but he is at a loss to explain its origin. He, however, sets forth the hypothesis that it is produced by the decomposition of organic matter existing on the surface of the globe, in the depths of the sea, and in the different strata of the soil, and after its production, and in obedience to the laws of the tension of vapours, it is diffused in the atmosphere, from which it is eliminated with the meteoric waters.

M. Amédée Latour, the talented editor of the *Union Médicale*, has been obliged, owing to prolonged illness, to retire from the editorship of that well-known journal, and in recognition of his long service, extending over thirty-five years, he is allowed to retain the title of "Honorary Editor." Dr. Gustave Richelot, Hospital Surgeon and Agrégé of the Faculty, has been appointed to succeed him.

Paris, March 14th.

THE funds of the Victoria-park Hospital have been increased to the extent of £976 by the efforts of the Mile-end New Town Working Men's Society.

MEDICAL NOTES IN PARLIAMENT.

IN the House of Commons on Friday, the Metropolis Management and Floods Prevention Bill, so far as it related to the regulation of theatres and prevention of floods, was read a second time. Other clauses of the Bill to which objection was taken were withdrawn.

Private Bill Legislation.

On Monday, a resolution moved by Sir W. Harcourt was agreed to, for the appointment of a special Committee, to whom shall be referred all Private Bills promoted by Municipal and other Local Authorities, by which it is proposed to create powers relating to police or sanitary regulations which deviate from, or are in extension of, or repugnant to, the general law.

A petition was presented from Mile End Old Town against the Infectious Diseases Notification Bill.

Deficiencies of Sight.

Mr. Gibson gave notice of the following question for Thursday, the 23rd inst., To ask the President of the Board of Trade whether his attention has been directed to a paper read on March 9th at the Ophthalmological Society of the United Kingdom, by Dr. C. E. Fitzgerald, on a case of remarkable deficiency of acuteness of vision in a seaman; and whether he would state the tests which are applied by the Board of Trade officials to discover the visual acuteness and colour-sight in seamen and railway officials.

Dwellings of the Poor.

On Tuesday, in reply to Mr. Firth, the Home Secretary said he would be happy to confer with the hon. member and the President of the Board of Trade as to the necessity of further legislation to provide dwellings for the poorer classes in the metropolis, who were ousted from time to time by public improvements. The operation of the thirty-third clause of the Metropolitan Street Improvement Act was admittedly not satisfactory.

Dr. Kenny and Michael Davitt.

Mr. Redmond asked whether permission had been refused to Dr. Kenny to visit Michael Davitt in Portland Prison. Sir W. Harcourt replied in the affirmative, remarking that he need not enter into the circumstances which made it improper, in his opinion, to allow Dr. Kenny to do so. He was willing to allow another medical man, whose name must first be submitted for approval, to visit the prisoner. Subsequently Mr. Redmond gave notice of another question on the same subject for Monday.

The Fishmarket Question.

On Thursday, in reply to Mr. Duff, Sir G. Hogg, Chairman of the Metropolitan Board of Works, stated that his attention had been called to the seizure of twenty-one tons of bad fish at Billingsgate last month, and to the need for increased market accommodation. When the subject was last discussed the Board decided that there was not sufficient time to prepare a Bill for this session, but the subject was receiving due attention.

Army Veterinary Department.

Mr. Childers replied to Major O'Beirne, that he was not yet able to state his decision regarding the readjustment of the relative rank and retiring pay for the officers of the Army Medical Department.

Medical Vacancies.

Mr. Gibson asked the Secretary of State for War whether, with regard to the Warrant of January, 1880, which directed that "(8) a public and open competition shall be held twice in the year, for the admission of qualified medical candidates as probationers, and that the number of appointments so competed for shall not be less than half of the number of vacancies which shall have arisen in the last completed half-year ending on the 30th June or 31st December," and that "(9) not less than half the number of vacancies shall be filled up by competition," he could state how many medical vacancies occurred in the half-year ending 31st December, 1881; and how many of such vacancies were filled up by competition at the last examination; and whether the terms of the Warrant, and the engagements it held out to candidates, had been satisfied.—Mr. Childers: Formerly, when the medical service was not so popular as it is now, and it was difficult to fill the ranks by competition, it was considered desirable that the Secretary of State should have the power to allow some of the first appointments to be made by selection from some of the principal medical schools; but it was provided that at last half the vacancies should be filled by competition. The word "vacancies," of course, means the number of appointments which it is requisite to fill up. As a matter of fact, that power of selection has never been exercised. All the vacancies have been filled by competition; so that in the direction of the question we have gone far beyond what the Warrant requires. But I may add that there were in reality no vacancies to be filled in the half-year ending December 31st, thirty medical officers having been thrown upon our hands from India; and the gentlemen who succeeded at the last examination will be appointed to future vacancies as they occur from time to time. Therefore the terms of the Warrant have been more than satisfied.

Obituary.

PROFESSOR SIR WYVILLE THOMSON.

NATURALISTS and the scientific world generally will hear with regret of the death of Sir Wyville Thomson, late Regius Professor of Natural History in the University of Edinburgh, which took place at his residence, Bonsyde, Linlithgowshire, on Friday, the 10th inst. Since his return from the *Challenger* expedition in 1876, Sir Wyville has not enjoyed his previous robust health, and in June, 1879, he had a paralytic seizure, since which he has been unable to conduct his class in the University, or to continue the important work in which he was engaged—the detailed report of the results of the *Challenger* expedition. In October of last year he resigned his chair, and since then his health has been extremely precarious.

Charles Wyville Thomson, the son of a surgeon in the East India Company's service, was born at Bonsyde, Linlithgow, on the 5th of March, 1830. He received his education at Mirchiston Academy and at the Edinburgh University with a view to entering the medical profession. He, however, early developed a taste for natural science, and at the age of twenty-one commenced to lecture on botany in King's College, Aberdeen, and the following year was appointed to Marischal College. In 1853 he was made Professor of Natural History in Queen's College, Cork. After holding this appointment for a year, he became Professor of Mineralogy and Geology in Queen's College, Belfast, where he established a valuable natural history museum. In 1870 he succeeded Professor Allman as Regius Professor of Natural History in the University of Edinburgh. It was through Sir Wyville Thomson's instrumentality that the dredging expeditions of the *Lightning* and *Porcupine* were made in 1868 and 1869, but his name is perhaps most widely known in connexion with the famous *Challenger* expedition which set out in 1872 under the command of Captain Nares. On his return to England after an absence of three and a half years, Professor Thomson received the honour of knighthood and a gold medal from the Royal Society of London. Sir Wyville was also a Knight of the Swedish order of the Polar Star, an LL.D. of Aberdeen, a D.C.L. of Dublin, a Doctor of Philosophy of the University of Jena, a D.Sc., a Fellow of the Royal Societies of London and Edinburgh, and a Fellow of the Linnean Society.

Besides many papers on natural science, Sir Wyville Thomson brought out two books on the *Challenger* expedition, entitled "Voyage of the *Challenger*," and "The Atlantic." The results of his previous expeditions he embodied in a work called "The Depths of the Sea." Sir Wyville's illness and premature death unfortunately prevented him completing what would have been the great work of his life, for three volumes only of the *Challenger* reports have as yet been published. The work, which is being continued under the able superintendence of Mr. John Murray, will, when completed, be a magnificent one, and will, it is expected, number twenty-six volumes.

Sir Wyville's straightforward, genial, and courteous disposition made him a general favourite, and secured for him a large circle of private friends.

The loss of such a distinguished professor and man of science cannot but be a serious one for the University.

During Sir Wyville Thomson's illness, the duties of the professorship were ably conducted by Professor Alleyne Nicolson of St. Andrews.

WILLIAM MILLER COULTATE, F.R.C.S. ENG.

WE have this week to record the death of William Miller Coultate, F.R.C.S. Eng., aged sixty-eight, at Burnley, Lancashire, where he had been in practice since 1836. The deceased was the son of a surgeon who practised in the same town. He completed his medical studies in Dublin; was possessed of great natural abilities, which he had carefully cultivated; and his information on many subjects, outside those relating to his profession, was varied and extensive. He was largely endowed with good common sense, was a sound and well-informed medical practitioner, and had had extensive experience both in private practice and in local consultations; was straightforward in his conduct, trustworthy and uniformly courteous in his intercourse with his professional brethren, who have lost in him an able adviser in difficult cases. He has left them an example in professional conduct calculated to have a lasting and beneficial influence on character. Besides being Vice-President of the Lancashire and Cheshire branch of the British Medical Association, he was certifying factory surgeon, and, till lately, surgeon of the 5th Royal Lancashire Militia. He was a borough and county magistrate, and for many years occupied a very prominent position in Burnley and the neighbouring parts of North-East Lancashire, was an alderman, more than once had the offer of the mayoralty, and was looked up to as the leading spirit in all municipal affairs, to which for many years he devoted his best energies. About a year ago his fellow-townsmen presented him with a service of plate, and had two portraits of him painted in oil, one of which was placed in the Council-chamber, the other in the Mechanics' Institute, of which he was a trustee. About six months ago he had an apoplectic seizure, with hemiplegia, from which he in great measure recovered; but on Saturday, the 4th of March, after a few days' illness, he had another seizure, which proved suddenly fatal. His loss to his family, his professional brethren, and to the town of Burnley is in many ways irreparable, and his memory will be long cherished by those who had the privilege of his acquaintance.

Medical News.

ROYAL COLLEGE OF PHYSICIANS OF LONDON. — The following gentlemen have passed the Primary Examination for the Licence (Chemistry, Materia Medica, &c.):—

Alpin, W. G. P.	Myles, J. P.
Bell, J.	Nuttall, C. D.
Benaley, C. N.	Oram, P. S.
Bird, H.	Parrott, T. G.
Butler, W. J.	Petherick, W.
Clarke, J. M.	Pocock, A. G. C.
Cock, J.	Quadros, M. A.
Deare, A. C.	Serjeant, G.
Dent, H. C.	Sharpley, E.
Des Voeux, H. A.	Simcock, G.
Forster, T. P.	Square, J. E.
Giles, O.	Stokes, L.
Hoyland, S. S.	Street, C. T.
Hunt, R.	Sutcliffe, J.
Irving, D. B.	Sutton, J. B.
Johnston, G. D.	Tait, H. B.
Jones, O. C.	Tenison, E. H.
Jones, R. N.	Voisin, A. B.
Jones, T.	Wharry, H. G. O.
Josling, C. L.	Wilkins, J. C.
Kendall, G.	Williams, A. J.
Lamb, H.	Williams, M. W.
Lane, F. H.	Wohrnitz, F. B. M.
Llewellyn, E. E.	Wood, N. T.
Miller, T. H.	Wright, G. R. M.
Milnes, J. G.	Zimmermann, B. F.

APOTHECARIES' HALL. — The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on March 9th:—

Beswick, Robert, Brighton.
Handford, Henry, Atherstone, Warwickshire.
Macaulay, Samuel, Fitzroy-avenue, Belfast.
Salmon, Arthur Gay, Truro, Cornwall.
Webber, Edward Samuel, Abergavenny, Monmouthshire.

THE Royal Christening at Windsor was attended by Sir W. Jenner, Dr. Playfair, Dr. Ellison, and Dr. Laking.

TWENTY-TWO cases of insanity are said to have resulted in France from the recent financial panic.

THE committee of the North Cambs Cottage Hospital have received from Miss Peckover a sum sufficient to maintain one bed in the institution.

THE annual dinner of the West London Hospital will be held at Willis's Rooms on May 17th, under the presidency of the Duke of Manchester, K.P.

AT the first meeting of the Board of Delegates of the Hospital Saturday Fund, Mr. S. Morley, M.P., was re-elected president, and the 2nd of September was fixed for the collection of the fund for the present year.

THE wife of a chemist was fined 40s. at the Brentford Petty Sessions for selling white precipitate powder without complying with the stipulations of the Sale of Poisons Act.

A CASE of accidental death from an overdose of morphia occurred last week at West Derby. The deceased was a medical student, who had for a long time been accustomed to employ the drug to relieve his sufferings from rheumatism and heart disease.

HULL AND SCULCOATES DISPENSARY.—The house-surgeon reports that during last year the visiting surgeons made 18,899 visits in the six districts assigned to them, and that the total attendance of out-patients at the institution was 58,061—an average of about 186 per diem.

A SAD case of death from glanders at Ramsgate is reported in the local papers. It appears that the owner of a diseased horse, in giving the animal a physic ball, accidentally scratched his arm against the horse's teeth, and thus contracted the horrible and fatal malady.

SOCIAL SCIENCE ASSOCIATION.—At the meeting to be held on March 20th, at 8 P.M., Charles Cameron, M.D., LL.D., M.P., President of the Health Department, in the chair, a paper will be read by G. W. Hastings, Esq., M.P., "On the Bills before Parliament for the Notification of Infectious Diseases."

INCREASE IN THE SALARIES OF POOR-LAW MEDICAL OFFICERS.—The salary of Dr. Rygate, medical officer for the North District of the Union of St. George's-in-the-East, has been increased from £120 to £150 per annum.—The salary of Dr. Porter, medical officer for the Bow District of the Poplar Union, has been increased from £130 to £150 a year.

SANITARY ASSURANCE.—At a public meeting of the Sanitary Assurance Association, on the 10th inst., H. Rutherford, Barrister-at-Law, delivered an address on Sanitary Assurance from a Householder's Point of View. Mr. Rutherford's remarks were devoted to the consideration of the subject as it would be viewed by the occupant of a dwelling-house anxious to protect himself and his family from baneful diseases. He quoted from Dr. De Chaumont's lecture on the same subject some statistics showing that about one-third of the annual mortality arose from diseases liable to be favoured or propagated by neglected house sanitation. A discussion followed the reading of the paper.

HOSPITAL FOR SICK CHILDREN.—The interests of his hospital were advocated in eloquent terms by the Duke of Connaught, who presided at the 30th anniversary last week at Willis's Rooms. His Royal Highness said the institution was founded thirty years ago for the purpose of giving nursing to the sick children of poor parents, and also diffusing greater knowledge among the medical profession of diseases peculiar to children. The hospital had steadily worked its way up to a high position. It commenced with 10 beds, and had now 172, including those in the Sanatorium at Highgate. During the past year 1050 children from all parts of the country had been admitted to the hospital, while some 13,000 children had been treated as out-patients. Since the foundation of the hospital 18,000 children had been admitted within its walls, and the number of out-patients had risen to the enormous figure of close upon 385,000. He thought he might congratulate the friends of the hospital upon the excellent work which had been done in its favour, but in so doing he must regret that in the last year the expenditure of the hospital had exceeded by £500 its available income, and had rendered it necessary for the committee to draw upon the invested capital of the charity. Subscriptions to the amount of £1000 were announced in the course of the evening.

VACCINATION GRANTS.—The following gentlemen have received the Government grant for efficient vaccination: Mr. G. A. Hicks, Public Vaccinator of the Bushey District, Watford Union, £15 12s. (second time). W. L. Emmerson, L.M., M.R.C.S., Public Vaccinator of the Waltham District, Melton Mowbray Union, £5 12s.

BLACKBURN INFIRMARY.—Miss Margaret Bashall, of "Marshfield," Park-crescent, Southport, who received a compound fracture of the thigh in the railway collision at Blackburn station on the 8th of August last, has made a donation of £250 to the Blackburn and East Lancashire Infirmary, in acknowledgment of the care and professional treatment she received in that institution during a period of two months and a half.

ROYAL MEDICAL BENEVOLENT COLLEGE.—The twenty-first festival dinner in aid of the funds of the College will take place at the Langham Hotel, Portland-place, on Wednesday, April 19th, under the presidency of Sir Erasmus Wilson. The council make a special appeal to the medical profession throughout England and Wales for aid in meeting the extraordinary expenses which have recently been incurred for the permanent benefit of the institution, and for such an increase in the regular annual subscriptions as may permit the continuance on the present scale, and if possible the enlargement, of its beneficent operations.

THE LEVEE.—The following members of the medical profession were presented to the Prince of Wales on behalf of Her Majesty at the levée held at St. James's Palace on the 9th inst.:—Dr. Hinckes Bird, Dr. T. B. Christie, Dr. Dyce Duckworth, Dr. Daniel John Duigan, C.B.; Dr. Harcourt, Dr. William Hickman, Dr. Priestley, Dr. Reid, R.N., Dr. Russell Reynolds, Dr. Sieveking, Dr. Samuel Wilks, Surgeon Robert W. Anderson, R.N., Surgeon Arthur W. E. B. Barrett, R.N., Surgeon Michael Fitzgerald, Deputy Inspector-General Timotheus John Haran, Surgeon-Major W. Johnston, A.M.D., Staff Surgeon Edward E. Mahon, Surgeon R. D. Murray, M.B., Dr. T. Irvine Rowell, Surgeon H. Saunders, A.M.D., Surgeon Charles H. Wheeler, M.D.

SANITARY INSTITUTE OF GREAT BRITAIN.—At the ordinary meeting of the institute, held on March 8th, Dr. A. Carpenter in the chair, the prize of £200 for an Essay on "The Range of Hereditary Tendencies in Health and Disease" was presented by the Rev. E. Wyatt Edgell, B.A., to Mr. G. Gaskoin, M.R.C.S., who afterwards read a paper on the subject of the essay. The author stated his belief that "diseases ordinarily undergo metamorphosis into a corresponding, or what Burton calls 'a symbolising disease,' agreeably to a method which they have. In common experience of direct heredity, a case will seldom be met with which goes through three removes or generations, and those distinguished writers who have been most industrious in collecting cases out of the records of medicine do not agree to more than six or seven generations as extreme. All diseases are hereditary, but all do not equally display heredity, and they are more or less transformed or direct in their transmission with inequalities affecting the various forms of disease. In skin diseases and insanity the hereditary influence is perhaps more than elsewhere evident." The general bearing of the essay was in favour of a long-enduring hereditary influence—to which, indeed, no limit can be assigned.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning, at the latest.*

BRATTY, WILLIAM T., L.R.C.P.E., L.F.P.S.Glas., has been appointed Surgeon to Messrs. R. Rogers and Co.'s Ironworks, Stockton-on-Tees.

BRISCOE, WILLIAM THOMAS, M.B., M.Ch.Dub., has been reappointed Medical Officer to the Workhouse and Second District of the Chippenham Union.

BURY, EDW. CHARLES, M.D. St. And., M.R.C.S., L.S.A.Lond., has been reappointed Medical Officer of Health to the Wisbeach Rural Sanitary District, and Physician to the Wisbeach Fever Hospital.

BURGESS, DUNCAN, M.A., M.B.Cantab., has been elected House-Physician to the Royal Hospital for Diseases of the Chest City-road, vice James Harper, M.B., whose appointment has expired.

CAPE, JOSEPH T., M.R.C.S., L.S.A.Lond., has been appointed Medical Officer to the Halwell District of the Totnes Union.

DREWITT, F. G. DAWTREY, M.B.Oxon., M.R.C.P. & M.R.C.S., has been elected an Assistant-Physician to the West London Hospital, Hammersmith, vice Dr. Montagu Lubbock, resigned.

GARLIKE, E. W. BENNETT, L.R.C.P.Ed., M.R.C.S., has been reappointed Medical Officer of Health for the Cheshunt Urban Sanitary District.

GARRARD, C. R. O., M.R.C.S., L.S.A.Lond., has been appointed House-Surgeon to the Rotherham Hospital, vice J. L. Jaquet, M.D., resigned.

GROOM, WILLIAM, M.B.Cantab., M.R.C.S., L.S.A.Lond., has been reappointed Medical Officer to the Second, Eighth, and Tenth A Districts of the Wisbeach Union.

HAINS, LALANDE J. C., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer to the Harberton District of the Totnes Union.

HARTRIDGE, GUSTAVUS, F.R.C.S.E., L.R.C.P.Lond., has been appointed Assistant-Surgeon to the Central London Ophthalmic Hospital.

JONES, RICHARD, L.R.C.P.Ed., L.F.P.S.Glas., has been appointed House-Surgeon to the Anglesey and Carnarvonshire Infirmary.

MAPLETON, G. H., M.B. & C.M., has been appointed Medical Officer to District No. 2, Montserrat, West Indies.

NOOTT, EDWARD, L.R.C.P.Ed., M.R.C.S., has been appointed Medical Officer to the Porlock District of the Williton Union.

POPHAM, S. LANE, M.D., M.Ch.Dub., has been appointed Medical Superintendent of the Craiglockart Hydropathic Establishment.

PUDDICOMBE, F. M., M.R.C.S., L.R.C.P.Lond., L.S.A.Lond., has been appointed House-Surgeon to the Teignmouth, Dawlish, and Newton Infirmary and Convalescent Home, Teignmouth, Devon.

RANDLE, J. MAYNE, L.R.C.P.Lond., M.R.C.S., has been reappointed Medical Officer to the Urborough District of the Totnes Union.

RISDON, G. OWEN, L.R.C.P.Lond., M.R.C.S., L.S.A.Lond., has been reappointed Medical Officer and Public Vaccinator to the Second District of the Wells Union.

SADLER, MICHAEL T., M.D.Lond., M.R.C.S., L.S.A.Lond., has been reappointed Medical Officer of Health for the Barnsley Rural Sanitary District.

SUTCLIFFE, ARTHUR EDWIN, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer to the C and D Divisions of the Manchester City Police, vice Cullingworth, resigned.

Births, Marriages, and Deaths.

BIRTHS.

ADAMS.—On the 3rd inst., at Barnes, Surrey, the wife of J. Adams, M.D., of a daughter.

BATEMAN.—On the 28th December, 1881, at Rylstone, near Sydney, New South Wales, the wife of Dr. Bateman, of a son.

FARNELL.—On the 13th inst., at Eastbourne, the wife of Henry Dawson Farnell, of a daughter.

GRASEMANN.—On the 1st inst., at Albany-street, N.W., the wife of C. E. Grasemann, M.D., of a daughter.

NEEDHAM.—On the 9th inst., at Westbury-gardens, Clapham-park, the wife of Joseph Needham M.D., M.R.C.P., of a daughter.

ROUT.—On the 12th inst., at 166, Cold Harbour-lane, the wife of Charles Rout, L.R.C.P., M.R.C.S., of a daughter.

TREVES.—On the 10th inst., at 18, Gordon-square, the wife of Frederick Treves, F.R.C.S., of a daughter.

MARRIAGES.

FRASER—ABBOTT.—On the 14th ult., at Rawul Pindee, by the Rev. W. F. Armstrong, Elizabeth Mary Stewart, third daughter of Deputy Surgeon-General A. H. Fraser, Army Medical Department, to Major George Masson Abbott, 19th Bengal Lancers.

MAITLAND—CHARSLEY.—On the 8th ult., at Colombo, Ceylon, Surgeon John Maitland, M.B., Madras Army, to Alice Maude, daughter of Edward Charsley, Esq., of Melbourne, Victoria.

PERCEVAL—LOUTTIT.—On the 2nd inst., at St. Mark's Presbyterian Church, Greenwich, Kent, by the Rev. George Elder, M.A., James Wilde Godfrey Perceval, Esq., youngest son of the late Frederick James Perceval, Esq., and grandson of the late Right Hon. Spencer Perceval, First Lord of the Treasury and Chancellor of the Exchequer, to Jane Milne, eldest daughter of Dr. James Louttit, of Vanbrugh-park, Blackheath.

DEATHS.

BARNARD.—On the 13th inst., at Upper Norwood, Deputy Surgeon-General George Barnard, M.R.C.S., H.M. Indian Medical Service (Retired List), aged 52.

BROWN.—On the 23rd ult., Alfred Gardiner Brown, F.R.C.S.Ed., aged 44.

COULTATE.—On the 4th inst., at Burnley, Lancashire, William Miller Coultate, F.R.C.S.E., aged 68.

DALTON.—On the 13th inst., at his residence, Cliff-road, Dovercourt, Deputy Inspector-General William Ruffell Dalton, R.N., aged 69.

FASSON.—On the 11th inst., at P.M.O.'s hut, Aldershot, Stanhope Hunter Fasson, M.D., Surgeon-General, Army Medical Department (late Royal Artillery), aged 58.

GRAHAM.—On the 13th inst., at 137, Southgate-road, N., Dr. R. T. Graham, in his 58th year.

HASSALL.—On the 26th ult., at Harrow, Fanny Augusta, wife of Arthur Hill Hassall, M.D., and granddaughter of Marie Teodore, Comtesse d'Arxy, aged 62.

MACKINTOSH.—On the 11th inst., at Poole, Andrew Wm. Mackintosh, late Surgeon to the R.M.S. *Pretoria*.

NEALE.—On the 19th ult., Charles Neale, M.R.C.S., L.S.A.Lond., late of Westbourne-terrace, North, and of Grafton-road, Plaistow, in his 70th year.

TATE.—On the 7th inst., at Chequergate, Louth, Fred. Septimus Tate, M.R.C.S., L.S.A.Lond., aged 62.

N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*

Medical Diary for the ensuing Week.

Monday, March 20.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; on Tuesday, 9 A.M.
MEDICAL SOCIETY OF LONDON.—The President (Mr. Francis Mason), "On a Case of Sarcoma of the Septum Nasi eight years after operation (living specimen)."—Dr. Stephen Mackenzie, "On the Treatment of Chronic Dysentery by large Enemata of Nitrate of Silver."—Dr. Fletcher Beach, "On Atrophy of the Brain in Imbeciles."

Tuesday, March 21.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.
ROYAL INSTITUTION.—3 P.M. Professor John G. M'Kendrick, "On the Mechanism of the Senses."
ANTHROPOLOGICAL INSTITUTE OF GREAT BRITAIN AND IRELAND.—8 P.M. Mr. A. L. Lewis, "On the Relation of Stone Circles to Outlying Stones or Tumuli, or Neighbouring Hills."—Messrs. J. E. Price and F. G. Hilton Price, "On Excavations of Tumuli on the Brading Downs, Isle of Wight."—Major-General Pitt-Rivers, "On the Distribution and Varieties of a Padlock."
PATHOLOGICAL SOCIETY OF LONDON.—8.30 P.M. The following specimens will be shown:—Sarcoma of Epididymis; Sequestrum in Head of Femur; Obstruction of the Bowels in a Marmoset; Variation in Structure of Alimentary Canal; Ulcer of Duodenum; Calculus in Ureter; Sarcoma of Tonsil; Necrosis of Epiglottis; Hepatic Abscess; Hæmorrhage from Cerebral Tumour; So-called Ichthyosis of the Tongue; Tubercular Vomicæ from an Eland; Intestinal Obstruction caused by a Diverticulum; Tumour of Shoulder-joint (card specimen); Dilatation of Heart (card specimen).

Wednesday, March 22.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.—Skin Department.—1.45 P.M., and on Saturday at 9.15 A.M.
HUNTERIAN SOCIETY.—8 P.M. Report of the Committee on Mr. Stevens's Case of Cerebral Tumour.—Dr. H. Part, "On a Case of Hæmophilia with Joint Disease."—Mr. R. Clement Lucas: "Double Popliteal Aneurism with Epithelium of Tongue and Palate in the same Subject;" "A Case of Destructive Lupus of the Face."

Thursday, March 23.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—1½ P.M. Surgical Consultations.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2½ P.M.
ROYAL INSTITUTION.—3 P.M. Professor Tyndall, "On Resemblances of Sound, Light, and Heat."

Friday, March 24.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 2 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
ROYAL COLLEGE OF PHYSICIANS OF LONDON.—5 P.M. Lumleian Lectures: Dr. Bardon Sanderson, "On Pathology of Inflammation."
QUEKETT MICROSCOPICAL CLUB.—8 P.M. Mr. E. T. Newton, "On Fishes' Tails."
ROYAL INSTITUTION.—3 P.M. Professor W. E. Ayrton, "On Electric Railways."
CLINICAL SOCIETY OF LONDON.—Mr. Warrington Haward, "On a Case of Removal of the Hypertrophied Spleen."—Dr. Goodhart and Mr. Golding Bird, "On a Case of Nephrectomy for Scrofulous Kidney."—Dr. Barlow and Mr. Godlee, "On a Case of Extirpation of the Kidney for Calculous Pyelitis."—Mr. Howard Marsh, "On a Case of Pyelitis; Exploration of the Kidney; Partial Removal; Death from Suppression of Urine."—Mr. Pearce Gould, "On a Case of Spina Bifida cured by Injection of Iodine."

Saturday, March 25.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Professor H. G. Seeley, "On Volcanoes."

METEOROLOGICAL READINGS.

(Taken daily at 5.30 a.m. by Steward's Instruments.)

THE LANCET OFFICE, March 16th, 1882.

Date.	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Dry Bulb	Wet Bulb	Solar Radia in Vacuo	Max. Temp Shade	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Mar. 10	30·32	W.	52	50	..	57	43	..	Overcast
,, 11	30·45	N.W.	52	50	..	50	48	..	Overcast
,, 12	30·51	S.W.	48	47	..	56	42	·07	Overcast
,, 13	30·58	W.	43	43	..	48	36	..	Overcast
,, 14	30·47	W.	43	41	..	61	37	..	Foggy
,, 15	30·50	W.	44	42	..	59	39	..	Foggy
,, 16	30·64	W.	46	44	..	62	39	..	Hazy

Notes, Short Comments, and Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

We cannot prescribe, or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Lectures, original articles, and reports should be written on one side only of the paper.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

NEGLECTED SICK CHILDREN AND CORONERS.

Mr. Clement E. Priestley sends us a very important account of a child of poor parents, suffering from whooping-cough and bronchitis, which was brought to him, and whose life he thought endangered by being brought out of the house. The child was insured. The parents alleged they were too poor to pay a doctor, and Mr. Priestley advised application to a relieving officer. This, it was found, had been made, but without success, the "House" being offered and refused. A third visit, at the interval of a week from the second, was kindly made by Mr. Priestley in response to an urgent message, and the child died the day after. Mr. Priestley declined to certify, and thought this a case which a coroner should have investigated to ascertain how far the parents and the parish had done their duty. We think so, too. But the coroner politely declined the investigation, and the registrar suggested that the doctor's reason for declining a certificate was that he had not got his fees. The medical man deserves praise in such cases for kindness both in visiting and in directing the attention of the coroner to them. It is to be feared they are too common.

Mr. Thomas Percival.—The correspondence forwarded to us is not sufficient to satisfy us that Mr. Grabham is at fault, or that there is any such *casus belli* between our correspondent and him as to justify us in publishing the letters.

SALICYLATE OF SODA IN THE TREATMENT OF ACUTE TONSILLITIS.

To the Editor of THE LANCET.

SIR,—A few lines to corroborate Dr. Hunt's results in the treatment of acute tonsillitis by salicylate of soda. This mode of treatment was, I believe, first brought forward by Dr. J. K. Fowler, in your issue of Dec. 11th, 1880, and since then I have invariably adopted that plan in every case of acute tonsillitis. In only one case (where I was called in late) did abscess supervene, and this was the only case where any rheumatism followed. This fact strengthens Dr. William Stewart's view (THE LANCET, Jan. 22nd, 1881), that the rheumatism, following acute tonsillitis, is pyæmic in origin, and is due to the absorption of pus from the tonsillar abscess, which is prevented by the prompt use of the salicin compounds.

I believe that abscess in the tonsil can be entirely prevented by the free and early use of salicin, and that chronic hypertrophy, which so often follows repeated attacks, can be also prevented by continuing the drug for a week or ten days after all inflammation has subsided. I have noticed that salicin does not always prevent the other tonsil from becoming inflamed, though it always renders the attack abortive.

I am, Sir, very obediently yours,

AMAND J. ROUTH, M.B., B.S. Lond.

Upper Montagu-street, Montagu-square,
March 14th, 1882.

CORONER'S FEES TO SURGEONS OF POOR-LAW HOSPITALS.

Mr. Oscar B. Shelswell and *Dr. Learn.*—The question raised by our correspondents is perhaps not free from difficulty. But we are informed that the magistrates object to the payment of the medical officers of Poor-law infirmaries, and it must be allowed that such institutions come under the head of "any public hospital or infirmary," though supported neither by "endowments nor voluntary subscriptions."

Sanitarian.—We are not aware of any recent manual of the kind named, but the separate Acts are readily procured.

Mr. Marsh is thanked.

Mr. Evens.—The letter was received, but referred to a matter with which we could not deal with advantage.

HYPODERMIC INJECTION OF QUININE.

To the Editor of THE LANCET.

SIR,—Permit me briefly to remark with reference to this subject that during the year 1877 I published in the *Indian Medical Gazette* a paper, the object of which was to record the very favourable opinion I had formed of this mode of treating intermittent fever.

To briefly summarise the twenty-four cases in which I made systematic observations, I found that "the average number of grains of neutral sulphate of quinine used in these twenty-four cases amounts to 3·23. . . . . The average number of operations was 3·08. In two cases the number of injections reached the high figure of 24 and 20 respectively. In both of these cases the injection was given two or three times daily till the fever was quelled. . . . . The number of days after which the fever was stopped averages 2·58." The number of days in hospital I found to average 7·62 (as against 11·8 of 1875). In no case was the excess of days in hospital due to the presence of inflammation, ulceration, or other sequels of the operation."

I am, Sir, your obedient servant,

6th Bengal Cavalry, Sagowlie, Feb. 11th, 1882. GEORGE S. RANKING.

P.S.—I wish to thank those gentlemen who have so courteously written to me on the subject of a case of skin disease in which I asked for information. I hope to be able to acknowledge the letters I have received, but should I be prevented doing so, I hope that press of work will be accepted as my excuse for the omissions.

"HEALTH OF CANNES."

To the Editor of THE LANCET.

SIR,—Your correspondent, "L. G.," cannot have read my letter carefully. I simply stated that we (the English medical men practising at Cannes) were informed that arrangements were in progress at a considerable expense to the town for emptying the cesspools only at night. I am glad to be able to say that these arrangements have now been carried out (as I am informed), and also that the bureau sanitaire promised by the maire is also working. In future if anyone has a complaint to address to the authorities it will at once be investigated by the official who is at the head of this office. Any letter, even in English, will receive attention. I trust that English yachts will not be deterred in future from visiting the port, as the nuisance "L. G." complained of is not likely to occur again.—I am, Sir, yours faithfully,

Cannes, March 9th, 1882. J. A. MENZIES, M.D.

Enquirer.—The qualifications are—for general chemistry the Associateship of the Institute of Chemistry, Somerset House-terrace, London; for metallurgical chemistry, the Associateship of the Royal School of Mines, South Kensington. Preparation for either examination may no doubt be obtained at the Firth College.

A Student.—Yes.

Mr. Melville.—Beasley's (Churchill), 6s. 6d.

Alpha.—Roscoe, Fownes.

Dr. H. Collins.—We are unable to give any information beyond that contained in an annotation in our present number.

"NÆVUS OF THE LABIA MAJORA."

To the Editor of THE LANCET.

SIR,—I would suggest to your correspondent, "Nonensis," who has a case of nævus of one labium majus in an infant, that he may with ease and success use Dr. Richardson's solution of sodium ethylate, according to the mode advised by him and others. I have at present the treatment of a child with nævus of the scalp and another circular nævus of the leg, and by perseverance in this almost painless treatment I find most favourable results.—I am, Sir, yours truly,

St. Columb, Cornwall, March 12th, 1882. WM. MOORMAN.

To the Editor of THE LANCET.

SIR,—In answer to the query of "Nonensis," in THE LANCET of March 11th, I beg to advise him to use electrolysis. He will find one application most likely enough, and, if done well, he will be very pleased with the result. I have done four or five on the labia extending upwards and inwards, and after a month or so I could hardly trace where the nævus had been.—I am, Sir, yours truly,

Burwood-place, W., March 14th, 1882. SYDENHAM J. KNOTT.

MEDICAL AMENITIES AT STOCKTON.

OUR attention has been called to an unseemly occurrence at an inquest at Stockton, in which a surgeon rather severely criticised the professional conduct of another surgeon. We reserve all comment on the case, as further legal proceedings are threatened.

Mr. Dawson.—No.

TIGHT-LACING.

To the Editor of THE LANCET.

SIR,—I have just returned from a visit to Rome and Florence, where I saw, of course, the famous ideals of female beauty—the Vatican Venus, the Capitoline Venus, and the Venus de Medicis; and it occurs to me that instead of lecturing and writing on the evils of tight-lacing, &c., a more forcible appeal to those concerned would be made by the exhibition of a Venus *à la mode*. The fashion-plates give us pictures of the female form *à la mode* clothed or "dressed;" let one of our distinguished sculptors give us the same form in marble, and let it be placed where all the world may see. The sculptor, if a man of experience, will reply to this suggestion, "Neither will they be persuaded, though one rose from the dead;" nevertheless, it may be worth the consideration of those who write and lecture on the subject.

I am, Sir, your obedient servant,

London, March 14th, 1882. C. J. W.

"TOBACCO SMOKING: AN APPEAL."

To the Editor of THE LANCET.

SIR,—In reply to "G.'s" inquiries on the above subject, I would advise him to observe the following precautions:—

1st. To choose as pure a tobacco as possible, the best "golden returns" for instance, not damped.

2nd. To select the best briar-root pipes (having three or four in use), and never to smoke a pipe that is foul, as possibly the nicotine of tobacco would produce the effects from which he suffers.

3rd. To smoke between his meals (not after), taking at the same time hot coffee and milk in equal proportions.

I am, Sir, yours very truly,

Camden-road, N.W., March 14th, 1882. EDWARD BATT, M.D.

PARASITIC NATURE OF ALOPECIA AREATA.

To the Editor of THE LANCET.

SIR,—I notice in the report of the last meeting of the Pathological Society that Dr. Thin is reported to have said, in answer to a query from the President (Dr. Wilks), if any author had noticed the parasitic nature of alopecia areata, and he said, "None." May I call Dr. Thin's attention to my lectures upon "Ringworm and other Diseases of the Skin," published in 1878, by Messrs. Baillière, Tindall, and Cox, in which I distinctly refer to the parasitic origin of this disease; and in my last edition of lectures on parasitic diseases I have an illustration of the same.

I am, Sir, your obedient servant,

Sackville-street, W., March 13th, 1882. JAMES STARTIN.

Candidate.—We think it is to be regretted that the number of vacancies to be filled up is not stated in the advertisement for candidates for the army in the same manner as for the navy and Indian service. Our correspondent, however, is mistaken in supposing that the Royal Warrant was departed from in not filling up the number of vacancies he supposed to exist. The reduction in the number of appointments arose, we believe, from the withdrawal of a large number of medical officers from the Cape, their services being no longer required there. Our correspondent should have written to Whitehall-yard to ask how many appointments were to be given, instead of trying to estimate them himself from a study of the Army Lists.

"CELLULOID SYRINGES."

To the Editor of THE LANCET.

SIR,—A notice appeared in your impression of the 4th inst. of Messrs. Mayer and Meltzer's so-called "celluloid" syringes and trusses. The material used by those gentlemen is made by the British Xylonite Co., Limited, of London, and known as "xylonite," the name it has always borne in England, which is the home of the invention. An analogous material, under the name of "celluloid," has been manufactured in America, and the use of this word would give an impression to the trade that the instruments referred to were made of the foreign substance, and thus deprive xylonite of the credit justly reflected on it by your favourable criticism.—I am, Sir, your obedient servant,

New Broad-street, London, E.C., March 9th, 1882. E. LEIGH BENNETT.

INQUIRIES INTO SUDDEN DEATH IN SCOTLAND.

To the Editor of THE LANCET.

SIR,—I ask leave, through your columns, to draw attention to the way sudden-death inquiries are at times conducted in Scotland. On the 7th inst. a man fell down in a public-house, and on my arrival in a few minutes I found he was dead. I was unable to certify the cause of death. I find on inquiry at the registrar's that the county Procurator Fiscal has himself, without the aid of any medical man, so far as I am aware, certified the death as one of heart disease. I should like to know if you consider such a proceeding legal, and if such action is common.

I am, Sir, yours, &c.,

March 16th, 1882. ENQUIRER.

THE VACCINATION ACT IN LEEDS.

MR. THOMAS HOLMES, the vaccination officer for the Leeds Union, has presented the following report to his Board of Guardians:—

"Gentlemen,—I beg to lay before you the following statement showing the general results of the accompanying tabulated statement, prepared according to the order of the Local Government Board:—The number of children whose births were returned to me for the half-year ending June 30th, 1881, amounted to 3059, and the percentages are 91·4 vaccinated, 7·13 died before the operation could be performed, 1·06 were not found, having removed from the township; the insusceptible, sick, those notified to the officers in whose districts they are living, and the three who refused to obey the law amounted to 0·64. The supplementary return also required for the whole of the year 1880 shows that 5773 births were registered, and of that number 89·3 per cent. were vaccinated, 9·7 per cent. died unvaccinated, 0·5 per cent. removed and could not be found, and the remainder, including a few objectors, reached to 0·3 per cent. The Local Government Board in its last report alludes to the previous results produced as being an example for other large urban districts to follow. Of the cases not accounted for in the half-year ending June 30th, 1881, 24·2 per cent. are illegitimate children, and 21·2 of them were children born in your workhouse hospital, and who were allowed to leave without being protected. Not a death had resulted from small-pox within the township since July, 1877, until the 6th August last, when a male adult, who had been on the tramp, fell a victim to the disease. The next death was that of an unvaccinated child, aged four months, who was born within the Dewsbury Union, and died here on September 29th last, but no death from the disease has occurred in the township since that date, and during the last thirteen and a half years only one child who was born and vaccinated in the township has died from small-pox. Beyond these returns I have registered during the half-year ending June 30th, 1881, the vaccination of twenty-three children, many of them not born in England, and of the others the birthplace was not known. I have also received certificates of successful vaccination of forty-five children who were born in other districts. These certificates have all been sent to the proper officers. Dr. Stevens, the chief inspector of the medical department in the Local Government Board, recently inspected the work done within the union, and there is reason to believe that he was well satisfied with it."

AN INTERESTING CASE OF CONGENITAL MALFORMATION.

To the Editor of THE LANCET.

SIR,—A few weeks ago I met with a peculiar instance of malformation, which I think is worth recording in your widely read pages. The case is that of a lad aged seventeen, whose auditory apparatus on the right side, to all intents and purposes, is wanting. The individual in question is a pale-faced, heavy-looking youth, whose appearance attracted immediate attention, the auricle on the right being in a very rudimentary condition, consisting only of a small lobule, above which are two or three small nodules of cartilage representing the helix. Upon a closer inspection no trace of a meatus was discernible, neither could the fingers determine the existence of one beneath the skin, the bones in that situation being, as it were, welded together.

The hearing on the left side is good, but no auditory impressions are received on the right side. His relatives cannot in any way account for the existence beyond that the mother when pregnant fell from a horse while riding and hurt herself. No doubt it is one of those freaks of nature which defy explanation, some derangement of the nervous system or imperfect nutrition in the fœtus giving rise to the condition.

It is quite consistent with reason and experience to believe that mental impressions on the mother may injuriously affect the fœtus, many examples being on record; but in this there is no history of such a state. The fœtus also, as we all know, is liable to various pathological changes, as arrest of development, amputation of limbs, and many other affections; so, is it not possible that in this case the fœtus may have been subjected to an inflammation of the meatus, with subsequent occlusion of the canal? I am, Sir, yours, &c.,

Rhayader, Jan. 31st, 1882. F. L. C. RICHARDSON, L.R.C.P. Ed.

THIMBLE IN THE LARYNX.

To the Editor of THE LANCET.

SIR,—On Jan. 23rd, at 8 P.M., I was sent for to a confinement in a village five miles from here. As I rode into the village a working man rushed frantically up to me, begging that I would at once visit his child, which he said had, in the absence of its mother, just choked itself with something. I found the child, an infant of eight months old, apparently dying, gasping occasionally for breath, pale and faint, and nearly gone. I explored the fauces with my finger, and could feel that the epiglottis was fixed in the upright position, and would not shut, but could feel no foreign body. Turning the child upside down, and slapping its back, at first produced no effect, but after a third repetition of this manœuvre, the child coughed, and up came a thimble—of a large size for a woman, and made of brass. It is evident that the thimble was in the larynx, small end first, and that its rim prevented the closure of the glottis. Had I been ten minutes later the child must have died, for, as it was, recovery was very difficult, and for some minutes I had to give wine and water guttatim to restore respiration and vitality.

I am, Sir, yours truly,

March, 1882. RICHARD JELLEY.

GEORGE HENRY LAMSON.

Mr. Philip W. G. Nunn is thanked for forwarding to us the very remarkable testimonials of George Henry Lamson. The titles assumed, excepting those of the two Edinburgh corporations, are known to be spurious. One of the testimonials is known to be forged, and there is some internal evidence in the others of their not being more authentic. The melancholy position of Lamson is no reason for losing sight of the immoral way in which he has manufactured titles, honours, and testimonials.

Mr. Holmes.—Application might be made at the National Hospital for the Paralysed and Epileptic, Queen-square, London.

Mr. Shaw.—Next week.

Meldreth.—We do not prescribe.

CASE OF FETID DISCHARGE FROM THE NOSTRIL.

To the Editor of THE LANCET.

SIR,—Some few weeks ago a delicate-looking lad, aged seven years, came under my attention suffering from an offensive discharge from the nose. The parents of the child informed me that the discharge had existed for three years, during which period several medical men had been consulted and several modes of treatment adopted, but without success.

On examination I found that the discharge, which was copious and exceedingly offensive, proceeded from the right nostril only, through which there was almost complete inability to sniff. The child being nervous and irritable, I had chloroform administered in order to make my examination of the nostril complete. On passing a probe I felt a hard substance firmly fixed in the nostril, which I failed to dislodge with any instrument at hand. A few days later chloroform was again administered, and I then managed, by means of an instrument in the form of a scoop, to dislodge the substance, which proved to be an ordinary boot button, much altered in character by its long residence in the nose, but easily distinguishable by its metal shank. I have ventured to publish this simple case, as it demonstrates the necessity of making sure of the absence of a foreign body in all cases of fetid discharge from the nose (especially from one nostril) in children.

I am, Sir, yours obediently,

Rydal Villa, Clevedon, Somerset, G. F. RICE PIZEY, M.R.C.S.
March 5th, 1882.

FRESH VACCINE LYMPH.

To the Editor of THE LANCET.

SIR,—Perhaps some of your readers may have experienced an annoyance similar to what occurred to me a week ago. At a short notice I was called upon to vaccinate several children. I applied to the National Vaccine Establishment for tubes, and received three. On the morning for vaccination about twenty-five children were brought to me. I was unable to procure lymph from any private source, so I applied to the institution, and received the three tubes above-mentioned. In the first two tubes the lymph was simply solidified and useless; in the third I managed to obtain just sufficient to vaccinate three of the children in two places each. How is it, may I ask you and your readers, that such useless lymph should be supplied to public vaccinators? I personally have kept lymph in tubes in excellent preservation for months, and used it without failure. I should like to hear something from others on this matter.—I am, Sir, yours faithfully,

March 14th, 1882. L.R.C.P. Lond.

PLUMBING.

THE New York Academy of Medicine, at its sitting on the 2nd ult., had its attention directed to the importance of good plumbing in house construction by a paper by Mr. C. F. Wingate. Dr. Fordyce Barker, the President, in his opening remarks, said:—"None but physicians are alive to the fact that many of those now living in beautiful and expensive houses in this city [New York] are like the inhabitants who dwell at the base of Mount Vesuvius, in a soft, balmy, voluptuous atmosphere, surrounded by vineyards and gardens luxuriant with the olive, and the fig, and the orange tree, which mask and hide the danger and desolation of the lava and ashes."

Young Practitioner.—Tanner's Index of Diseases and their Treatment (Renshaw).

Epilepsy should consult our advertising columns.

PHYSICIANS THE PATRONS OF UNQUALIFIED PRACTITIONERS.

To the Editor of THE LANCET.

SIR,—In a large village within a few miles of a town in the North of England are two unqualified practitioners, who have been in practice here for over twelve years. They not only practise on their own responsibility, but are recognised by physicians from the town, who meet them in consultation, and sometimes recommend patients to see So-and-so, one of the unqualified men. Seeing that the place possesses several registered medical men, how can you explain the conduct of the physicians? I have been often asked the question, "Is a qualification really a necessity?"

I enclose my card, and remain, Sir, yours truly,

March, 1882. H. W.

SPLENOTOMY: A JUSTIFIABLE OPERATION IN LEUCOCYTHÆMIA?

To the Editor of THE LANCET.

SIR,—With reference to the letter of Mr. H. A. Reeves, which appeared in your issue of the 4th inst., in which he takes objection to my definition of splenotomy in leucocythæmia "as a useless and deadly experiment," may I venture to offer (in addition to the substantial proofs already adduced) some slight logical reasons for making that obnoxious assertion?

Mr. Reeves will, I venture to think, concede that "in the present immature state of our knowledge and experience on the subject" all operative interference with the view of curing leucocythæmia or mitigating its effects must be purely speculative, and therefore undoubtedly employed wholly in the light (darkness?) of "experiment."

That the operation is "deadly" in leucocythæmia is proved by the fact that some of the most celebrated surgeons in the world (and, so far as our records teach us, no surgeon of unknown fame has yet undertaken this operation) have attempted its performance but with the same invariable result—death in a few minutes, in a few hours, and in one case (Mr. Spencer Wells's second) in three days. And, lastly, that this measure is absolutely "useless" is more than testified to, not only by the fact that no patient has yet derived the least benefit from its employment, but also by the slight effects which its frightful fatality appears to have produced in staying its further employment.

Mr. Reeves in the same letter remarks that the early history of all great operations has always been a discouraging one, and more especially in the various branches of abdominal surgery, but the many and great difficulties have in all cases (except in gastrostomy and splenectomy) been surmounted. Now, I must, with all due deference to Mr. Reeves, decline to admit that the history of splenotomy, apart from its association with leucocythæmia, has been discouraging or unsuccessful. On the contrary, I would venture to submit that the very success of this operation in properly selected cases has been the means of inducing surgeons to prosecute its employment in leucocythæmia.

With regard to the three queries put forward by Mr. Reeves to justify the further performance of this operation, I must crave indulgence if I consider that they are already practically answered in the article to which Mr. Reeves has honoured me by referring. And it will only be necessary for me to again point out here the indubitable fact that at present we possess not the faintest proof nor the slightest evidence to warrant us in suspecting that, even should the patient survive the effects of the operation, he would derive the least permanent benefit from its performance. And until such proof exist or such evidence be adduced as may justify us in anticipating a less hopeless result than the history of splenotomy at present affords, I most humbly confess that I must regard the operation in all cases of leucocythæmia as a "useless and deadly experiment." I am, Sir, yours faithfully,

Junior Athenæum Club, Piccadilly, W., March 13th, 1882. HERBERT COLLIER.

Mr. Wm. Riddell.—Full information as to the preparation of koumiss, or galactozyme as it should be called if made from cow's milk, will be found in Dr. Carrick's work.

Dr. Kaeser.—Next week.

A Subscriber.—We must refer our correspondent to the articles on the subject which have appeared in late numbers of THE LANCET.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Playfair, London; Sir Joseph Fayrer; Dr. B. C. Waller, Edinburgh; Dr. Duffey, Dublin; Mr. E. Owen, London; Mr. Crosswell Rich, Liverpool; Mr. Francis Mason, London; Mr. R. F. Fisher, London; Mr. Adams, Maidstone; Mr. Millican, Kineton; Mr. Bond, Bedford; Mr. Scott, Manchester; Mr. Firth, Blackburn; Dr. Kaeser, London; Mr. Nunn, Bournemouth; Mr. Moorman, St. Columb; Dr. Dickinson, Victoria; Dr. Dudfield; Mr. Reginald Harrison, Liverpool; Mr. Startin, London; Mr. Wilson, Carlisle; Dr. Hooper, London; Mr. Cave Thomas, London; Dr. Tom Robinson, London; Mr. E. Lloyd, London; Mr. P. Swain, Plymouth; Dr. Macaulay, Newcastle-on-Tyne; Mr. Physick, London; Dr. Boyd; Mr. Higgins, London; Mr. Farquharson, Stockton; Mr. Gilbert, Hammersmith; Mr. Pink, London; Dr. Grabham, Pontefract; Mr. Percival, Knottingley; Dr. Dunlop, Glasgow; Mr. de Quadros; Mr. G. W. Mackenzie, London; Mr. Riddell, Belfast; Mr. Bennett, London; Dr. Spence, Burntwood; Mr. W. Wallis, London; Dr. Caddy, London; Dr. Steele, St. Louis; Dr. Menzies, Cannes; Mrs. Gladstone; Mr. Armstrong, Newcastle-on-Tyne; Mr. Sampson Gamgee, Birmingham; Dr. Barnes, Hartismere; Dr. Danford Thomas, London; Mr. Knowsley Thornton, London; Mr. Holmes; Mr. Wallace, Brockley; Mr. W. D. Spanton, Hanley; Mr. J. Turton, Heckmondwike; Mr. A. J. Routh, London; Mr. Ormsby, Dublin; Mr. Hunting, London; Dr. Collins, Paignton; Mr. Shaw, Louth; Mr. Shelswell, London; Mr. Shirley Murphy, London; Mr. Sager, Todmorden; Mr. Lennox Browne, London; Messrs. Lee and Martin, Birmingham; Mr. Smith, Exeter; Mr. Keay, Eastbourne; Mr. Berridge, Loughborough; Mr. Heath, Walsall; Messrs. Mackay and Co., London; Messrs Wyleys and Co., Coventry; Mr. Boyde, Pill; Dr. Louth, Blackheath; Rev. A. J. D. D'Orsey; Editor of the *Eastbourne Chronicle*; M. D. H.; C. J. W.; Upholder; M.D., B.S. Lond.; L.R.C.P. Lond.; Epilepsy; Enquirer; London Stereoscopic Company; S. U. M.; Young Practitioner; Candidate; Xerxes; M.B.; One who has been Bitten; Inquirer; C. B.; F.R.C.P.; &c., &c.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Long, Wells; Mr. Taylor, Colchester; Mr. Pugh, Birmingham; Mr. Wright, Chippenham; Mr. Harrison, Sherborn; Mr. Wallace, Fraserburgh; Mr. Brown, Barnsley; Dr. Strange, Belsize-park; Mr. Shirtliff, Kingston-on-Thames; Mrs. Thomson, Leatherhead; Mr. Hogston, Peterhead; Dr. Blandford, London; Messrs. Sharpe and Co., Glasgow; Mr. Barton, Dublin; Mr. Earp, Nottingham; Mr. Forbes, Drumlithie; Mr. Treves, London; Mr. Samy, Singapore; Dr. Mills, Norwich; Messrs. Thimbleby and Co., Spilsby; Messrs. Fouiger and Co., London; Mr. Mayler; Dr. Redwood, Rhymney; Dr. Bramwell, Edinburgh; Mr. Norman, Cheltenham; Miss Godfery, Hemsley; Messrs. Slinger and Co., York; Dr. Blythman, Swinton; Mr. Dengate, New Basford; Messrs. Soutar, Blairgowrie; Dr. Barton, Lifford; Mr. Heely, Kennington; Mr. Ratter, Hammersmith; Mr. Hemsted, Whitchurch; Mr. Prentice, Huddersfield; Mr. Robertson, Berwick-on-Tweed; Mr. Hodgkins, Leicester; Mr. Fosbroke, Birmingham; Mr. Willey, Sheffield; Mr. Bryan, London; Mr. Knox, Glasgow; Mr. Morton, Sheffield; Mr. Leech, Hanley; A. B., Stoke Newington; Alpha; Beta, Stoke Newington; G. B. S.; X. Y. Z., Bishops Stortford; Medicus, Rotherhithe; L. M. P. I.; Medicus, Hartland; B., Aberdeen; Practice, Bristol; Medicus, Nic; F. R. C., Nottingham; Medicus, Newport; X., Devizes; Amicus; Hants; M.D.; S. C. R., Gainsborough; St. James; Beta, East Ilsley; New Cross; B., Bournemouth; B. C.; P. R. T., Liverpool; K.; H. W., Bath; Mayfair; &c., &c.

Eastern Morning News, Church Standard, Australasian Veterinary Journal, The Ironmonger, Todmorden Advertiser, Todmorden and District News, Richmond and Twickenham Times, Northern Echo, Western Daily Mercury, North Star, Louth Advertiser, Keene's Bath Journal, Manchester Examiner, Bristol Times and Mirror, &c., have been received.

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Advertisements (to ensure insertion the same week) should be delivered at the Office not later than Wednesday, accompanied by a remittance.

Answers are now received at this Office, by special arrangement, to Advertisements appearing in THE LANCET.

Terms for Serial Insertions may be obtained of the Publisher, to whom all letters relating to Advertisements or Subscriptions should be addressed.

Advertisements are now received at all Messrs. W. H. Smith and Sons' Railway Bookstalls throughout the United Kingdom, and all other Advertising Agents.

Tables of Contents, with the Index of Advertisements, for each Number can be had on application to the Publisher.

Agent for the Advertising Department in France—J. ASTIER, 67, Rue Caumartin, Paris.